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F-117--AIRCREW TRAINING

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This volume implements AFPD 11-2, *Flight Rules and Procedures*; AFPD 11-4, *Aviation Service*; and AFI 11-202V1, *Aircrew Training*. It applies to all F-117A units. This volume is not applicable to Air National Guard or Air Force Reserve Command units. MAJCOMs/DRUs/FOAs are to forward proposed MAJCOM/DRU/FOA-level supplements to this volume to HQ USAF/XOOT, through HQ ACC/DOTO, for approval prior to publication IAW AFPD 11-2. Copies of MAJCOM/DRU/FOA-level supplements, after approved and published, will be provided by the issuing MAJCOM/DRU/FOA to HQ USAF/XOOT, HQ ACC/DOTO, and the user MAJCOM/DRU/FOA offices of primary responsibility. Field units below MAJCOM/DRU/FOA level will forward copies of their supplements to this publication to their parent MAJCOM/DRU/FOA office of primary responsibility for post publication review. **NOTE:** The terms Direct Reportin Unit (DRU) and Field Operating Agency (FOA) as used in this paragraph refer only to those DRUs/FOAs that report directly to HQ USAF. Keep supplements current by complying with AFI 33-360V1, *Publications Management Program.* See paragraph **1.3.** of this volume for guidance on submitting comments and suggesting improvements to this publication.

This volume requires the collection or maintenance of information protected by the Privacy Act of 1974. The authority to collect and maintain the records prescribed in this volume are 37 USC 301A, *Incentive Pay*; Public Law 92-204 (Appropriations Act for 1973), Section 715; Public Law 93-570 (Appropriations Act for 1974); Public Law 93-294 (Aviation Career Incentive Act of 1974); DOD Directive 7730.57, *Aviation Career Incentive Act and Required Annual Report*; AFI 11-401, *Flight Management*; and E.O. 9397. System of records notice F011 AF XO A, Air Force Operations Resource Management System (AFORMS) applies. The reporting requirements in this volume are exempt from licensing in accordance with paragraph 2.11.10 of AFI 37-124, *The Information Collections and Reports Management Program; Controlling Internal, Public, and Intra-agency Air Force Information Collections*.

This volume contains references to the following field (subordinate level) publications and forms which, until converted to departmental level publications and forms, may be obtained from the respective MAJCOM publication office:

Publications: ACCR 50-31, *Training Records and Performance Evaluation in Formal Flying Training Programs.*

Chapter 1—GENERAL GUIDANCE **5**

1.1. Abbreviations, Acronyms, and Terms 5

1.2. Responsibilities 5

1.3. Processing Changes 7

1.4. Training 7

1.5. Training Concepts and Policies 8

1.6. Ready Aircrew Program (RAP) Policy and Management 9

1.7. Training Sortie Program Development 10

Table 1.1. Annual F-117 RAP Sortie Requirements (Inexperienced/Experienced) 11

1.8. Training Records and Reports 11

1.9. Armament Recording 11

1.10. Pilot Utilization Policy 11

1.11. Sortie Allocation Guidance 12

Table 1.2. F-117 Maximum Sorties for Other Than RPI-1 Pilots 13

1.12. Waiver Authority 13

Chapter 2—INITIAL QUALIFICATION TRAINING **14**

2.1. General 14

2.2. Approval/Waiver for Local IQT 14

2.3. Prerequisites 14

2.4. Ground Training 14

2.5. Flying Training 14

2.6. IQT for Senior Officers 15

Chapter 3—MISSION QUALIFICATION TRAINING **16**

3.1. General 16

3.2. Ground Training 16

3.3. Simulator Training 17

3.4. Flying Training 18

Chapter 4—CONTINUATION TRAINING **20**

4.1. General 20

4.2. Ground Training 20
Table 4.1. Ground Training 23
4.3. Flying Training 24
4.4. Special Categories 26
Table 4.2. Non-RAP Annual Requirements 27
4.5. Multiple Qualification/Currency 27
4.6. Currencies/Recurrencies/Requalification 28
Table 4.3. F-117 Pilot Currencies 29
4.7. Regression 30
4.8. End-of Cycle-Requirements 31
4.9. Proration of End-of-Cycle Requirements 31
Table 4.4. Proration Allowance 32
4.10. Regaining CMR/BMC Status 33
4.11. Example of the Lookback, Regression, Proration, and Requalification Process 33
Figure 4.1. Regression Flow Chart 35
4.12. Instrument Training 35

Chapter 5—WEAPONS DELIVERY QUALIFICATION **37**
5.1. General 37
5.2. Initial Qualification 37
5.3. CT Qualification 37
5.4. Weapons Delivery 37
5.5. Live Ordnance 38

Chapter 6—SPECIALIZED TRAINING **39**
6.1. Mission Lead Upgrade 39
6.2. Flight Lead Upgrade 39
6.3. Simulator Instructor (SI) 40
6.4. Instructor Pilot (IP) Upgrade 41
6.5. Pre-deployment Spin-up Training 42

Attachment 1—GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION **44**

Attachment 2—GLOSSARY OF MISSION/SORTIE AND EVENT DEFINITIONS **61**

Attachment 3—VERIFICATION GUIDE FOR AIR-TO-SURFACE 66

Attachment 4—TRAINING SHORTFALL REPORT 68

Chapter 1

GENERAL GUIDANCE

1.1. Abbreviations, Acronyms, and Terms. See **Attachment 1**.

1.2. Responsibilities:

1.2.1. HQ ACC/DO is designated the responsible agency for this volume in accordance with (IAW) AFPD 11-2. HQ ACC/DO will:

1.2.1.1. Chair semi-annual Air Combat Command (ACC) Realistic Training Review Boards (RTRBs) to review ground and flying training requirements/programs for Combat Air Forces (CAF) units. RTRB participants will include applicable ACC active and reserve component representatives. Major command (MAJCOM)/DOs with major weapons systems for which ACC is lead command will be invited to send representatives and/or inputs.

1.2.1.2. Process all change requests.

1.2.2. All applicable major commands (MAJCOMs) will:

1.2.2.1. Determine training requirements to meet expected unit tasking.

1.2.2.2. Forward all MAJCOM/FOA/DRU supplements to HQ ACC/DOTO, who in turn will forward to HQ USAF/XOOT for approval. Provide HQ USAF/XOOT and MAJCOM/DO a copy of approved supplements to this volume.

1.2.2.3. Review subordinate unit supplemental instructions and supplemental training programs annually.

1.2.3. Direct reporting units (DRUs) will:

1.2.3.1. Provide standard instructional texts to support operational weapons/tactics training. Forward two copies to each MAJCOM and numbered air force (NAF)/DO, and five copies to each CAF wing/ group.

1.2.3.2. Review, update, and distribute changes to instructional texts annually.

1.2.3.3. Review subordinate unit training programs annually.

1.2.4. Wing/group commanders will:

1.2.4.1. Develop programs to ensure training objectives are met. Assist subordinate units in management of training programs, ensure programs meet unit needs, and provide necessary staff support.

1.2.4.2. Attach Rated Position Indicator (RPI)-6/8 flyers to a flying squadron.

1.2.4.3. Designate the training level to which each RPI-6 flyer will train. Provide MAJCOM/DOT with a list of Basic Mission Capable (BMC) and Combat Mission Ready (CMR) designated manning positions Not Later Than (NLT) the beginning of each training cycle. Review programs and manning position designations annually. OG/CCs will report changes in position designations as they occur during the year to MAJCOM/DOT.

1.2.4.4. If applicable, forward supplements to this volume and other supporting documents to the MAJCOM for review. Review supplements annually.

1.2.4.5. Identify training shortfalls that adversely impact combat capability. Units are required to submit anticipated shortfall reports each quarter to MAJCOM/DOT (info copy to NAF/DO) (Due 31 Oct, 31 Jan, 30 Apr) and a summary shortfall report at the end of the training cycle (Due 31 July). Prior to submitting the annual report, units are reminded to prorate incomplete training, as detailed in **Chapter 4**, **Chapter 5**, and **Chapter 6** of this volume and the RAP Tasking Message. (For training report format, see **Attachment 4**, Training Shortfall Report.) Negative reports are required. **NOTE:** This report may be submitted on the HQ ACC/DOTO homepage.

1.2.5. Squadron commander (SQ/CCs) will:

1.2.5.1. Ensure adequate continuity and supervision of individual training needs, experience, and proficiencies of assigned/attached pilots.

1.2.5.2. Ensure review of training and evaluation records of newly-assigned pilots and those completing formal training, to determine the training required for them to achieve BMC or CMR and to ensure provisions of this volume have been met.

1.2.5.3. Ensure Ready Aircrew Program (RAP) missions are oriented to developing basic combat skills, or practicing tactical employment simulating conditions anticipated in the unit mission. Provide guidance to ensure only effective RAP missions are logged as RAP sorties. See **Attachment 2** for RAP mission definitions.

1.2.5.4. Review qualifications and training requirements of Flight Surgeons (FS) and determine appropriate flight restrictions if applicable.

1.2.5.5. Determine missions/events in which individual BMC pilots will maintain qualification versus familiarization.

1.2.5.6. Determine utilization of BMC pilots.

1.2.5.7. Determine how many and which BMC and CMR pilots will carry special capabilities/qualifications.

1.2.5.8. Identify the levels of supervision required to accomplish the required training, unless specifically directed.

1.2.5.9. Determine breadth and depth of supervisory review of armament recordings.

1.2.5.10. Assist the wing/group in developing the unit training programs.

1.2.5.11. Monitor individual assigned/attached pilots currencies and requirements.

1.2.5.12. Ensure pilots only participate in sorties, events, and tasks for which they are adequately prepared, trained, and current.

1.2.6. Individual pilots will:

1.2.6.1. Hand carry all available training records to assist the gaining unit in assessing qualifications and training requirements.

1.2.6.2. Be responsible for completion of training requirements and currencies within the guidelines of this volume.

1.2.6.3. Ensure they participate only in ground and flying activities for which they are qualified, current, and prepared.

1.3. Processing Changes:

1.3.1. Forward recommendations for change to this volume to MAJCOM DOT on Air Force (AF) Form 847, **Recommendation for Change of Publication**.

1.3.2. MAJCOMs will forward approved recommendations to HQ ACC/DO through HQ ACC/DOTO.

1.3.3. HQ ACC/DO will:

1.3.3.1. Coordinate all changes to the basic instruction with MAJCOM/DO.

1.3.3.2. Process recommendations for change.

1.3.3.3. Forward recommended changes to HQ USAF/XOOT for HQ USAF/XO approval.

1.3.3.4. Address time sensitive changes by immediate action message.

1.3.4. MAJCOM/DOs will determine training requirements for their subordinate units. This includes making changes, additions, or deletions to this volume at anytime. These changes may be via supplement or RAP Tasking message. HQ ACC/DO will be an info addressee on all changes.

1.4. Training. Training programs are designed to progress pilots from Initial Qualification Training (IQT) (B course or Transition/Re-Qualification Training (TX)), then to Mission Qualification Training (MQT), and finally to Continuation Training (CT).

1.4.1. IQT and TX provide the training necessary to initially qualify pilots in a basic position without regard to the unit's mission. Upon completion of IQT or TX, the pilot attains Basic Aircraft Qualification (BAQ) status. BAQ is a prerequisite for MQT. Except for general officers above wing level, BAQ is not a long term qualification status. Waiver authority for any pilot, other than general officers above the wing level, to remain BAQ for longer than 6 months is MAJCOM/DO.

1.4.2. MQT provides the training necessary to initially qualify or re-qualify pilots in a specific position and flying duties to perform the missions assigned to a specific unit. Pilots maintain BAQ status until they have completed MQT. Completion of MQT or an Formal Training Unit (FTU) instructor course is a pre-requisite for BMC and CMR.

1.4.3. **CT.** There are two aspects of CT. The first consists of pilot training in the basic flying skills contained in **Table 4.2.** These skills (Non-RAP requirements) ensure safe operation of the aircraft. The second consists of specific mission-related training required to accomplish the unit's assigned missions.

1.4.4. Ready Aircrew Program (RAP) is the CT program designed to focus training on capabilities needed to accomplish a unit's core tasked missions. Following completion of IQT/TX and MQT, a pilot will have received training in all the basic missions of a specific unit, unless excepted in **Chapter 3**. The pilot will then be assigned to either a Combat Mission Ready (CMR) position or a Basic Mission Capable (BMC) position.

1.4.4.1. **CMR.** The minimum training required for a pilot to be qualified and proficient in all of the primary missions tasked to their assigned unit and weapons system.

1.4.4.2. All designated Combat Aircraft (CC-coded) unit active duty RPI-1/2 positions, flying SQ/CC and SQ/DO positions are designated CMR positions. OG/CCs may designate other RPI-6 positions not assigned to the flying squadron as CMR. (**EXCEPTION:** If a unit is over-manned, the SQ/CC may elect to train the front line of their Unit Manning Document (UMD) RPI-1/2s to CMR and designate the overage BMC. In this case, priority should be given to inexperienced pilots with at least 50%, if available, designated CMR.) CMR pilots maintain proficiency and qualification in all core missions of the flying unit to which they are assigned or attached. CMR pilots maintain currencies which affect CMR status, accomplish all core designated flight training (sorties and events), and all mission ground training. Failure to complete this training or maintain these currencies results in regression to Non-CMR (N-CMR) status unless waived by appropriate authority. While N-CMR, pilots may perform missions (including exercises and contingencies) in which they are current and qualified, similar to BMC pilots.

1.4.4.3. **BMC.** The minimum training required for pilots to be familiarized in all, and may be qualified and proficient in some, of the primary missions tasked to their assigned unit and weapons system.

1.4.4.4. All other active duty wing pilot positions are designated BMC positions. BMC designations are assigned to pilots who have a primary job performing wing supervision or staff functions that directly support the flying operation, are FTU instructors, or operational test pilots. However, these pilots are required to provide additional sortie generation capability, either in lieu of or in addition to, the personnel assigned to the flying squadrons. BMC pilots maintain familiarization with all unit core missions. They may also maintain proficiency and qualification in some of the unit core missions. For those missions in which they maintain familiarization only, BMC pilots must be able to attain proficiency and qualification in 30 days or less. BMC pilots accomplish all mission related ground training designated by their attached SQ/CC. BMC pilots may deploy and may participate in any mission for which they are proficient and qualified, without additional training, as determined by the SQ/CC. Failure to complete BMC required training results in regression to Non-BMC (N-BMC) status. While N-BMC, pilots may not perform combat training without supervision until re-certified.-

1.4.4.5. **N-CMR/N-BMC.** Pilots that regress to N-CMR/N-BMC status will accomplish a tailored program to regain CMR/BMC status as specified by the SQ/CC.

1.4.4.6. **Specialized Training.** Specialized training is training in any special skills necessary to carry out the unit's assigned missions that is not required by every pilot. Specialized training consists of upgrade training such as Flight Lead Upgrade (FLUG), Instructor Pilot Upgrade (IPUG), etc., as well as CT to maintain proficiency and qualification in unit tasked special capabilities and missions. Specialized training is normally accomplished after a pilot is assigned CMR/BMC status; and is normally in addition to CMR/BMC requirements. Unless otherwise specified, pilots in CMR or BMC positions may hold special capabilities/qualifications as long as any additional training requirements are accomplished.

1.5. Training Concepts and Policies:

1.5.1. Units will design training programs to achieve the highest degree of combat readiness consistent with flight safety and resource availability. Training must balance the need for realism against the expected threat, pilot capabilities, and safety. This volume provides training guidelines and policies for use with operational procedures specified in applicable flying/operations publications.

1.5.2. ACC Training Support Squadron (ACC TRSS) will develop and validate training programs when/where tasked by the HQ ACC/DO. Other MAJCOMS may submit requests for training program support to the HQ ACC/DO. If validated, these requests will be prioritized and tasked to ACC TRSS. Designated Test Units (CB) may develop syllabi to upgrade Operation Test Aircrew in support of specific test plans. These syllabi will be approved by the OG/CC and submitted to ACC TRSS.

1.5.3. Design training missions to achieve combat capability in squadron tasked roles, maintain proficiency, and enhance mission accomplishment and safety. RAP training missions should emphasize either basic combat skills, or scenarios that reflect procedures and operations based on employment plans, location, current intelligence, and opposition capabilities. Use of procedures and actions applicable to combat scenarios are desired (e.g., appropriate use of code words, authentication procedures, combat tactics, safe recovery procedures, tactical deception, in-flight reports, threat reactions, Intel briefing/debriefing).

1.5.4. **In-flight Supervision:**

1.5.4.1. Unless specifically directed, the SQ/CC determines the level of supervision necessary to accomplish the required training. If the mission objectives include introduction to tasks or instruction to correct previous discrepancies, then an instructor may be required. However, if mission objectives require direct supervision, then a SQ supervisor may be necessary.

1.5.4.2. IPs and Flight Lead (FL)-qualified SQ supervisors may allow any pilot to lead limited portions of a mission if they are appropriately briefed. This provision will only be used to allow a pilot to practice events in which he is already qualified or to help determine if the pilot is ready for FLUG. In either case, the Instructor Pilot (IP) or SQ supervisor is responsible for the flight.

1.5.4.3. Flight leads may give their wingman the tactical lead for specific tasks. As the tactical lead, the wingman makes tactical decisions for the flight, but the flight lead retains overall authority and responsibility.

1.5.5. Pilots will not be required to accomplish ground and/or ancillary training except as required by this volume or AFI 36-2201, *Developing, Managing, and Conducting Training.*

1.5.6. Tactical training should include use of inert and live ordnance.

1.5.7. The pilot training cycle is 12 months; 1 July through 30 June. Units will complete training requirements during the appropriate training cycle unless where specifically excepted.

1.6. Ready Aircrew Program (RAP) Policy and Management:

1.6.1. Each RAP qualification level is defined by a total number of RAP sorties, broken down into mission types, plus specific weapons qualifications and associated events as determined by the MAJCOM and unit commanders.

1.6.2. The total number of RAP sorties for a qualification level is the primary factor for maintaining an individual's qualification level. The breakout of sortie/mission types is provided as a guideline to be followed as closely as possible but minor variances (other than Red Air allocations) are authorized. Variations in sortie/mission types may be used as a basis for regression by the SQ/CC. Qualification in a mission is determined by the SQ/CC considering the MAJCOM guidance and the individual's capabilities.

1.6.3. An effective RAP training sortie requires accomplishing a tactical mission profile or a building block type sortie. Each profile or sortie requires successfully completing a significant portion of the events applicable to that sortie type, as determined by the SQ/CC and **Attachment 2**.

1.6.4. The SQ/CC's first priority should be to train all designated pilots to CMR.

1.6.5. Progression from BMC to CMR requires:

1.6.5.1. A 1-month lookback at the higher sortie rate.

1.6.5.2. Qualification in all core missions and weapons events required at CMR.

1.6.5.3. Confirmation that the progressed pilot can complete the prorated number of sortie/event requirements remaining at CMR by the end of the training cycle.

1.6.5.4. Completion of mission-related ground training, to include a current verification or certification.

1.6.5.5. Squadron CC certification.

1.6.6. SQ/CCs will determine and assign pilots that will train for and maintain special capabilities or qualifications. Specialized training is normally accomplished in addition to baseline CMR/BMC sortie/event requirements; except for mission commander and flight lead training.

1.6.7. Wing CMR and BMC pilots will fly the required monthly sortie rate. If unable, refer to Regression, paragraph **4.7.**

1.6.8. End of Cycle training requirements are based on the pilots experience level on the last day of the current training cycle.

1.6.9. Units converting to another Mission Design Series (MDS) may fly pilots in CMR positions at the BMC rate until one month prior to the operationally ready date if the Utilization Rate (UTE) rate will not support CMR sortie rates. CMR pilots should be flown at a CMR rate for the month prior to Initial Operational Capability (IOC).

1.7. Training Sortie Program Development:

1.7.1. RAP sortie and event requirements (see **Attachment 2** for definitions) apply to CMR and BMC pilots as well as those carrying special capabilities or qualifications and are IAW the RAP tasking message. The standard sortie requirements at **Table 1.1.** establish the minimum number of sorties per training cycle for BMC and CMR levels of training. The RAP tasking message takes precedence over this volume, and may contain an updated sortie requirement or missions/events not yet incorporated in **Attachment 2**.

1.7.2. Non-RAP requirements (Inst/Aircraft Handling Characteristics (AHC)) are in addition to RAP requirements. These sorties ensure basic pilot skills are maintained. Units are also allocated Navigation sorties for their RPI-1/2 pilots. These sorties ensure that pilots maintain their skills necessary to operate safely in the civil airspace environment.

1.7.3. Collateral or Cost of Business sortie requirements must be considered when developing unit flying hour programs. These sorties are not directly related to combat employment training but are necessary in day to day unit operations. These include but are not limited to instructor sorties, ferry flights, incentive/orientation flights, deployments, and air shows. For the annual training cycle, the MAJCOM allocates a block of sorties to the unit for these purposes.

1.7.4. Unit flying hour programs are allocated a number of attrition sorties that compensate for non-effective training sorties. Non-effective sorties are logged when a training sortie, RAP or Non-RAP, is planned, but a major portion of valid training for that type of mission is not accomplished due to poor weather, air aborts, etc. In order to accurately allocate the number of attrition sorties, it is essential that non-effective sorties are logged appropriately.

Table 1.1. Annual F-117 RAP Sortie Requirements (Inexperienced/Experienced).

MAJCOM	Cycle	BMC	CMR
ACC (Annual)	RAP Total	72/60	94/82
	3-Month Lookback	18/15	23/20
	1-Month Lookback	6/5	8/7

1.8. Training Records and Reports:

1.8.1. Units will maintain pilot records for individual training and evaluations IAW: AFI 11-202V1, *Aircrew Training*; AFI 11-202V2, *Aircrew Standardization/Evaluation Program*; AFMAN 37-139, *Records Disposition Schedule*; ACCR 50-31 (ACCI 11-464), *Training Records and Performance Evaluation in Formal Flying Training Programs*; AFM 171-190V2, Sections A through K; and appropriate MAJCOM directives.

1.8.2. Track the following information for all pilots (as applicable):

1.8.2.1. Ground training.

1.8.2.2. Requirements and accomplishment of individual sorties, RAP sortie types, and events cumulatively for the training cycle.

1.8.2.3. RAP sortie requirements and accomplishment using 1-month and 3-month running totals for look-back.

1.8.2.4. Currencies.

1.8.2.5. Weapons employment records in sufficient detail to document all employment attempts as well as to compute Circular Error Probable (CEP) and event hit percentage histories.

1.8.3. Units may fill in Air Force Operations Resource Management System (AFORMS) "NO DATE" with either the date of the last FTU or USAF Weapons School (USAFWS) equivalent accomplished, or the unit mission certification date.

1.9. Armament Recording:

1.9.1. Pilots will use and assess all available training documentation such as Aircraft Video Tape Recorder (AVTR) and Head Up Display (HUD) tapes on all tactical missions. Pilots will review their own tapes with their flight/element member(s).

1.9.2. As a guide, the following AVTR items should be reviewed: titling, stealth/destealth check, weapons parameters, accuracy, adherence to Training Rules (TR), communications procedures and discipline, flight discipline, tactical employment, and instrument approaches.

1.10. Pilot Utilization Policy:

1.10.1. Commanders will ensure wing/group tactical pilots (RPI-1/2/6s) fill authorized positions IAW unit manning documents and that pilot status is properly designated. The overall objective is that pilots perform combat-related duties. Supervisors may assign pilots to valid, short-term tasks (escort officer, Flying Evaluation Board (FEB)/mishap board member, etc.), but must continually weigh the factors involved, such as level of pilot tasking, flying proficiency, currency, and experience.

1.10.2. Duties required by various publications that may be assigned to CAF RPI-1/2 pilots are weapons and tactics officer, programmer, flying safety officer, Supervisor Of Flying (SOF), mobility/contingency plans, training (except AFORMS documentation), SQ Standardization/Evaluation Liaison Officer (SELO), squadron life support officer, electronic combat officer, and other duties directly related to flying operations (Runway Operations Monitor (ROM), Range Control Officer (RCO), etc.). In some instances, such as squadron-assigned flying safety officers, RPI-1/2s may be attached to the wing. RPI-1/2s will not be attached to wing staffs or man wing staff positions unless total wing pilot RPI-1/2 manning is 100 percent or better. CCs will ensure wing staff pilots (RPI-6s) perform duties justified in MAJCOM manpower standards documents and authorized in UMDs.

1.10.3. Pilots will not perform long-term duties which detract from their primary duties of training for, or performing, the unit flying mission.

1.11. Sortie Allocation Guidance:

1.11.1. Inexperienced RPI-1/2 pilots should receive sortie allocation priority over experienced pilots. Priorities for sortie allocation are as follows:

1.11.1.1. **Formal Training Units.** Formal syllabus training, Instructor Upgrade, Instructor CT, authorized staff personnel not performing Instructor or Stan/Eval Flight Examiner (SEFE) duties (to include RPI-5 pilot physicians not on instructor orders).

1.11.1.2. **Combined Formal Training and Operational Units.** Formal syllabus training, CMR RPI-1/2, MQT RPI-1/2, CMR RPI-6, MQT RPI-6, BMC, RPI-5 pilot physicians, others.

1.11.1.3. **Operational Units.** CMR/RPI-1/2, MQT RPI-1/2, CMR RPI-6, MQT RPI-6, BMC (to include RPI-5 pilot physicians).

1.11.1.4. **Test, USAF Weapons School (USAFWS), and Tactics Eval Squadron (TES) Units.** Requirements directed by MAJCOM, training required to prepare for assigned projects/tasking, BMC training requirements that cannot be accomplished on primary missions, RPI-5 pilot physicians.

1.11.2. Wing RPI-6 authorizations are IAW unit manning documents. Active duty wings converting to new Primary Aircraft Inventory (PAI) are authorized one SQ equivalent (7/6 for 24/18 or less, PAI) of additional RPI-6s during the conversion period. However, total wing staff flying the new aircraft shall not exceed total authorized for final conversion equipage.

1.11.3. For FTU only wings, all RPI-6 pilots will maintain instructor status (optional for WG/GP CC, Functional Check Flight (FCF) pilots, and one other). These wings will fly RPI-1/2/6 pilots as required by Programmed Flying Training (PFT). For wings consisting of both FTU and operational units, at least one of the following pilots will maintain formal instructor status: WG/CC, WG/CV, OG/CC, OG/CD.

1.11.4. RPI-8 (above wing level) rated personnel flying authorizations will be IAW AFI 11-401 and MAJCOM guidance. They will fly the BMC rate, however they are not required to complete BMC

specific missions/events or meet monthly lookback requirements. Non-RAP requirements will be accomplished within their BMC number of sorties. Wings are allocated flying hours for attached RPI-8s.

1.11.5. There is no maximum sortie requirement for CMR pilots. **Table 1.2.** (ACC) defines the minimum and maximum sortie requirements for other pilots. On occasion, unique operations may require pilots to fly more than the maximum number of sorties authorized, however, this may impact training of other pilots.

Table 1.2. F-117 Maximum Sorties for Other Than RPI-1 Pilots.

RPI Level	CT Status (Minimum Sortie Requirement)	Unit's Aircraft Code	Organization Level	Maximum Sortie Allowance (Inexperienced/Experienced)
6/8	CMR	CC	Any	As required by qualifications
6	BMC	CC	Wing	96/82
6	BMC	TF	Any	As required by PFT
6	BMC	CB	Wing	As determined by test program requirements
8	BMC	CB	Wing	94/82
8	BMC	CC, TF, or CB	Above Wing	94/82-
5	BMC	CC, TF, or CB	All	If qualified and current in unit aircraft - 94/82. Otherwise, IAW AFI 11-202V1 as supplemented

1.12. Waiver Authority:

1.12.1. Unless specifically noted otherwise in the appropriate section, waiver authority for all requirements of the RAP Tasking Message and for all provisions in **Chapter 4**, **Chapter 5**, and **Chapter 6** of this volume is the OG/CC. For all other provisions of this volume, the waiver authority is MAJCOM/DOT, or as delegated.

1.12.2. Units subordinate to a NAF will forward requests directly to MAJCOM/DOT and provide their NAF/DO with an information copy.

1.12.3. Waivers to this volume will be valid until end of training cycle.

Chapter 2

INITIAL QUALIFICATION TRAINING

2.1. General. This chapter outlines the Initial Qualification Training (IQT) program of pilots into the F-117. IQT includes transition/re-qualification/senior officer (TX) training and normally will be conducted during formal syllabus courses at formal training units (FTUs) whenever possible. In exceptional circumstances, when FTU training is not available within a reasonable time period, IQT may be conducted at the local unit IAW the provisions of this chapter. This local IQT will normally be conducted using appropriate formal USAF Transition or Re-qualification Training Course syllabus tracks, flow programs, and requirements. When local IQT is authorized, ACC assumes responsibility for the burden of providing this training locally. The following guidance applies only to local IQT (other than being accomplished in the FTU).

2.2. Approval/Waiver for Local IQT:

2.2.1. HQ ACC/DO is the approval authority to conduct local IQT, and is waiver authority to change the formal requirements of locally conducted IQT. Info HQ ACC/DOT.

2.2.2. Requests to conduct local IQT will include the following:

2.2.2.1. Justification for the local training in lieu of formal course training.

2.2.2.2. Summary of individual's flying experience, to include last centrifuge training date.

2.2.2.3. Date training will begin and expected completion date.

2.2.2.4. Requested exceptions to formal course syllabus, with rationale.

2.2.3. Successful completion of IQT requires the upgrading pilot to complete an aircraft qualification and instrument evaluation IAW AFI 11-202V2.

2.3. Prerequisites. Course prerequisites will be IAW the appropriate formal course syllabus and AFCAT 36-2223, *USAF Formal Schools*.

2.4. Ground Training. Ground training may be tailored to the individual's background and experience or peculiar local conditions. However, available and current reference materials such as phase manuals, instructor guides, and audiovisual programs should be used as supporting materials to the maximum extent possible.

2.5. Flying Training:

2.5.1. Mission sequence and prerequisites will be IAW the appropriate formal course syllabus flow chart.

2.5.2. Training will be completed within the time specified by the approved syllabus. Failure to complete within the specified time limit requires notification through channels to HQ ACC/DO with pilot's name, rank, reason for delay, planned actions, and estimated completion date.

2.5.3. Pilots in IQT will fly under IP chased supervision until completing the qualification checkride.

2.5.4. Formal course syllabus mission objectives and tasks are minimum requirements for IQT. However, additional training events, based on student proficiency and background, may be incorporated into the IQT program with authorization of the SQ/CC. Additional training due to student non-progression is available within the constraints of the formal course syllabus and may be added at the discretion of the SQ/CC.

2.6. IQT for Senior Officers:

2.6.1. All formal training courses for senior officers (colonel selectees and above) will be conducted at the FTUs unless waived IAW paragraph **2.2.**

2.6.2. Senior officers must meet course entry prerequisites and will complete all syllabus requirements unless waived IAW syllabus and paragraph **2.2.1.**

2.6.3. If senior officers must be trained at the FTU to which they are assigned, they will be in formal training status. Unit duties will be turned over to appropriate deputies or vice commanders until training is completed. Exceptions to this policy must be approved by MAJCOM/DO.

Chapter 3

MISSION QUALIFICATION TRAINING

3.1. General. Mission Qualification Training (MQT) is a unit developed training program that upgrades pilots completing IQT to BMC or CMR. Guidance in this chapter is provided to assist the unit in developing their MQT program. MQT will also be used to re-qualify pilots who have regressed from BMC or CMR for any reason. MQT will train pilots to accomplish the unit mission. Units are allowed to tailor this program for all pilots, based on experience, currency, documented performance, and formal training. MQT to re-qualify regressed pilots will specifically address deficiencies which caused regression.

3.1.1. MQT requirements for upgrading FTU graduates may be reduced commensurate to the quality and quantity of MQT received at the FTU. If these graduates received a mission evaluation at the FTU, they do not require an initial local mission evaluation. Instead, their local MQT program should consist only of ground and flying training unique to the unit. Upon completion of this training, the pilots will be certified BMC or CMR by the SQ/CC.

3.1.2. During academic and flying training, special emphasis should be placed on AHC, night illusions, transition to instruments, task saturation, and spatial disorientation.

3.1.3. MQT will be completed NLT 90 calendar days (150 for Holloman AFB's monsoon season) after the individual's completion of IQT. MQT will be completed within 60 days of the individual's first F-117A MQT sortie. Training is complete upon SQ/CC certification to BMC/CMR. Notify the HQ ACC/DO if training exceeds 90 (150 for monsoon season) calendar days.

3.1.4. Initial verification, Night Air Refueling (NAAR), and initial Chemical Warfare (CW) simulator training will be completed NLT 90 calendar days from completion of MQT. NAAR and actual Laser Guided Bomb (LGB) delivery will be completed within 60 calendar days of CMR certification. Failure to comply will result in regression to N-CMR until qualification is complete. If accomplished in IQT, AAR and actual LGB delivery may fulfill MQT requirements at the discretion of the SQ/CC.

3.1.5. Pilots in MQT will not fly in FLAG, AIR WARRIOR, COPE THUNDER, or Weapon Systems Evaluation Program (WSEP) exercises.

3.1.6. Night transition training must be completed prior to night tactical training. Night training requires demonstrated proficiency and currency in similar day events.

3.1.7. Prior to CMR certification, pilots must initially qualify in all weapons delivery events required to be Qualified (QUAL) at CMR.

3.2. Ground Training:

3.2.1. Units will develop blocks of instruction covering areas pertinent to the mission as determined by the SQ/CC. Training accomplished during IQT may be credited towards this requirement.

3.2.2. **Initial Verification.** Pilots will initially accomplish a formal verification for their first CMR certification in the F-117A. Initial verification will be completed within 90 days of completing MQT. Suggested briefing guide is at **Attachment 3**. Each pilot will demonstrate to a formal board a satisfactory knowledge of the squadrons' assigned mission. Board composition will be established by the OG/CC. Desired composition is WG/CC, WG/CV, OG/CC, or OG/CD as chairman, SQ/CC or OPS Officer, weapons, electronic combat, intelligence, OGV, and plans representatives.

3.3. Simulator Training:

3.3.1. OFTs will be used if available. If an OFT is unavailable, MQT simulator requirements may be combined into one or more Cockpit Procedures Trainer (CPT) missions to accomplish appropriate switchology and emergency procedures training. MQT pilots should fly the missions outlined below. When appropriate, these will be flown as typical RAP profiles. Each training device mission will include selected critical action emergency procedures, spatial disorientation, channelized attention, and unusual attitude/inadvertent weather entry procedures. OFT/MQT-1 and OFT/MQT-2 are prerequisites for the first MQT flight.

3.3.2. **MQT OFT Profiles:**

3.3.2.1. **OFT MQT-1--Night Local Area Orientation (LAO)/Instruments.** Personal and mission preparation, normal ground operations, flight operations, navigation, emergency airfield procedures and approaches, published penetration and approach to primary alternates and home base, post-flight ground ops, and abnormal procedures. This mission may be conducted in conjunction with the Night Transition Phase Brief.

3.3.2.2. **OFT MQT-2--Night Transition and Emergency Procedures.** Normal night operations, all BOLDFACE Emergency Procedures, and selected non-BOLDFACE emergency procedures, weapons deliveries, partial panel instrument approaches, penetrations, and approach to primary alternate.

3.3.2.3. **OFT MQT-3--Night Attack.** Heavyweight takeoff, jettison procedures, tactical procedures, weapons deliveries (normal and backup), emergency divert procedures, hung ordnance procedures, and selected emergency procedures. This mission will be accomplished using a tactical scenario from a deployed location.

3.3.2.4. **OFT MQT-4--Night Attack and Weapons Anomalies.** Heavyweight takeoff, tactical scenario, weapons deliveries, (normal and backup), weapons anomalies, and selected emergency procedures.

3.3.2.5. **OFT MQT-5--Tactical Mission/Emergency Procedures Evaluation.** This mission will be administered by a SEFE IAW ACC and local directives.

3.3.3. **Initial CW Training (ICWT).** ICWT is designed to ensure pilot proficiency in the overall use of CW protective ensemble and to familiarize pilots with combat capabilities while wearing CW equipment. Pilots must complete ICWT NLT 90 days from completion of MQT.

3.3.3.1. **Ground Training.** All pilots will complete Phase I and Phase II training IAW AFI 32-4001, *Disaster Preparedness Planning*; and AFI 32-4002, *Operations, and Hazardous Material Emergency Planning and Response Compliance*; and MAJCOM supplements. The following training will be accomplished prior to the OFT training:

3.3.3.1.1. Physiological effects/first aid of chemical agents and protective gear.

3.3.3.1.2. Equipment orientation/fitting of full pilot ensemble.

3.3.3.1.3. Egress/hanging harness and water survival IAW MAJCOM and local guidance.

3.3.3.1.4. Full donning and doffing procedures/sequence.

3.3.3.2. **OFT CW-1.** Mission will be conducted in full ensemble (anti-exposure liners may be substituted for charcoal undergarment), harness, and G-suit. Mission will consist of emergency procedures, tactical mission profile, and doffing of simulated contaminated equipment.

3.3.3.3. Pilots will be CW certified upon the completion of all initial ground and OFT training.

3.3.3.4. The initial CW OFT mission may be credited towards CW CT requirements for the training cycle in which they were accomplished.

3.4. Flying Training. The appropriate missions from those listed below will be used to upgrade to BMC or CMR. Unit-developed MQT programs should use profiles typical of squadron missions. Maximum use of armament recording assets and actual deliveries are encouraged on all MQT missions.

3.4.1. **Supervision.** A SQ supervisor or IP is required unless specified otherwise. The SQ/CC will determine the proper flight position of the supervisor/IP unless specified otherwise.

3.4.2. **Prerequisites.** If more than 14 calendar days elapse between sorties, an additional review sortie will be flown before continuing the program. Night Phase Brief is prerequisite to Night Transition (NTR). NTR and NAAR Phase Briefs are prerequisites to NAAR.

3.4.2.1. All pilots must conduct practice airborne emergency procedures training during any one of the MQT sorties. As a minimum, the training will consist of briefing, flying, and debriefing a simulated critical action procedures scenario, to include airborne coordination with the SOF.

3.4.3. **Sortie Requirements.** LAO (or equivalent), NTR, NSA, NAAR, and NSAT-6 are minimum requirements for BMC/CMR certification (LAO not required if IQT was accomplished in the same local area). The other sorties are suggested profiles that may be adjusted based on pilot proficiency.

3.4.3.1. **NTR. Mission Objectives:** Practice night operations, medium altitude navigation, and instrument procedures. **Specific Mission Tasks:** Night preflight checks and taxi, departure, maneuvering in cruise and landing configurations, Navigation (NAV)/Steering modes practice, Tactical Air Navigation (TACAN) holding, penetration and approach, and Instrument Landing System (ILS) approaches.

3.4.3.2. **NSA. Mission Objectives:** Practice medium altitude navigation, normal weapons delivery, and partial panel instrument approaches. **Specific Mission Tasks:** 8-minute retrim, med/high altitude route navigation, simulated Level (LVL) mode LGB deliveries at high altitude on a single target, Simulated Single Engine (SSE) approach (two engine go around), partial panel precision and non-precision approaches.

3.4.3.3. **NAAR Mission Objectives:** Practice trail departure and NAAR operations. **Specific Mission Tasks:** trail departure (#2), station keeping, tanker rendezvous, tanker wing formation flying, and NAAR. NAAR may be flown as a mission in itself or be combined with any other mission.

3.4.3.4. **NSAT-1. Mission Objectives:** practice medium altitude tactical navigation, normal weapons delivery, and no-Multi Display Indicator (MDI) instrument approaches. **Specific Mission Tasks:** Medium altitude tactical navigation using Form (FM) 70 elapsed time, medium altitude LVL mode LGB deliveries on multiple targets, no-MDI precision and non-precision approaches.

3.4.3.5. **NSAT-2. Mission Objectives:** Practice medium altitude tactical navigation, normal weapons deliveries, and partial panel instrument approaches. **Specific Mission Tasks:** Medium altitude tactical navigation using FM 70 elapsed time, offset usage, manual laze at least one actual weapons delivery, and partial panel approaches.

3.4.3.6. **NSAT-3. Mission Objectives:** Practice medium altitude navigation to a Time Over Target (TOT), normal/backup weapons delivery, and instrument approaches. **Specific Mission Tasks:** Optimum range climb/cruise, medium altitude tactical navigation to a TOT, maximum range descent, and instrument approaches.

3.4.3.7. **NSAT-4. Mission Objectives:** Practice briefing a tactical mission, medium altitude tactical navigation to a TOT, normal/backup weapons delivery, and instrument approaches. **Specific Mission Tasks:** 8-minute retrim (if applicable), medium altitude tactical navigation to a TOT, SSE approach (two engine go around).

3.4.3.8. **NSAT-5. Mission Objectives:** Briefing and tactical employment proficiency enhancement. **Specific Mission Tasks:** Medium altitude tactical navigation to a TOT, normal weapons delivery, and instrument approaches.

3.4.3.9. **NSAT-6 (BMC/CMR Checkride, SEFE Required). Mission Objectives:** Demonstrate proficiency IAW MAJCOM directives and local evaluation criteria on a mission representing the unit's primary mission tasking. **Specific Mission Tasks:** IAW MAJCOM/local directives and as determined by the SEFE.

Chapter 4

CONTINUATION TRAINING

4.1. General. This chapter outlines ground and flying training requirements for CMR, BMC, and BAQ pilots. Refer to **Chapter 6**, Specialized Training, for additional training program specifics. Pilots must be qualified IAW AFI 11-202V1 and AFI 11-202V2. Additionally, they must complete IQT to fly in BAQ status; MQT or FTU instructor upgrade to fly in BMC; or MQT to fly in CMR status.

4.2. Ground Training. Ground training accomplished during IQT/MQT may be credited toward CT requirements for the training cycle in which it was accomplished. **Chapter 6** contains specialized programs with both flying and ground training requirements. The following programs comprise ground training only.

4.2.1. **Physiological Training.** IAW AFI 11-403, *Aerospace Physiological Training Program,* and MAJCOM supplements.

4.2.2. **Instrument Refresher Course.** IAW AFMAN 11-210, *Instrument Refresher Course Program*; AFI 11-202V2; and MAJCOM supplements.

4.2.3. **Survival, Evasion, Resistance, and Escape (SERE) Code of Conduct Continuation Training (CoCCT).** SERE CoCCT will be conducted IAW AFI 36-2209, *Survival and Code of Conduct Training,* and MAJCOM supplements thereto and, AFI 11-301, *Life Support Programs*. SERE CoCCT will be a coordinated Intelligence, Life Support, and Survival Specialist effort.

4.2.4. **Pilot Training Device--Operational Flight Trainer (OFT):**

4.2.4.1. **Table 4.2.** depicts the minimum training requirements. Units should determine additional CT training device supervision requirements based on expected employment tasking, training device capabilities, and mission training objectives.

4.2.4.2. Units will develop scenarios that cover all BOLDFACE emergency procedures, precision instrument approach procedures, and will develop other scenario requirements based on expected employment tasking and training device capabilities. Emphasis should be placed on training not readily attainable during daily flying activities. Units will review scenarios annually and update as required.

4.2.4.3. Unusual attitude and inadvertent weather entry procedures training and unusual attitude recovery training will be accomplished during all instrument or Emergency Procedure (EP) OFT training. Unusual attitude training will include recognition of HUD limitations, and non-HUD recoveries.

4.2.4.4. Pilots may receive credit for training accomplished in special devices such as the Advanced Simulator for Pilot Training (ASPT) or Higher Headquarters (HHQ)-directed simulator test support, if approved by the SQ/CC.

4.2.4.5. Tactical, EP, and CW missions will be accomplished in the OFT if available. If a unit does not have access to an OFT, EP and CW missions will be accomplished in the CFT.

4.2.4.6. **Chemical Warfare.** Accomplish IAW AFIs 32-4001/4002 and MAJCOM guidance. This training is intended to integrate pilot training with other functional areas (maintenance, intel-

ligence, security, etc.) required to conduct combat operations in a CW environment and is applicable to all CMR/BMC pilots assigned or deployable to chemical high threat areas.

4.2.4.6.1. Units will develop training plans and scenarios for CW training based upon anticipated wartime tasking in such an environment. The training program will be coordinated through and supported by disaster preparedness, life support, intelligence, and physiological training personnel as necessary. CW CT will primarily be through exercise scenarios complementing the unit's wartime training, from small to larger scale exercises, of sufficient duration to simulate chemical attack survival. CW scenarios may be incorporated into other unit exercises, however, CCs must give careful consideration to temperatures and the increased demands placed on personnel operating in CW gear.

4.2.4.6.2. Each pilot must conduct ground training annually, consisting of: donning the full pilot ensemble, hanging harness and egress training, donning of pilot hood, overcape, and overboots, doffing of the CW ensemble IAW current shelter processing procedures, and physiological effects of chemical agents and the appropriate first aid.

4.2.4.6.3. **OFT.** An OFT in full CW gear (anti-exposure suit liner may be substituted for charcoal undergarment), harness, and G-suit will be accomplished once each training cycle. Within the mission profile, practice doffing simulated contaminated equipment. CW OFT missions are intended to complement existing OFT mission profiles. CW missions are not additive to OFT requirements. Units without access to an OFT will use a CFT, egress trainer, or aircraft cockpit for CW training.

4.2.4.6.4. **CW CT Exercise.** As determine by the unit commander.

4.2.5. **Situational Emergency Procedures Training (SEPT).** This training is not an evaluation, but a review of abnormal/emergency procedures and aircraft systems operations/limitations during realistic scenarios. One pilot should present a situation and another discuss actions necessary to cope with the malfunction and carry it to a logical conclusion. BOLDFACE and squadron special interest items should be emphasized. Incorporate the following elements into the squadron SEPT training program:

4.2.5.1. SQ/CC involvement in the selection of a monthly SEPT topic.

4.2.5.2. Develop SEPT scenarios using F-117 mishaps/ incidents as baseline cases.

4.2.5.3. Discuss at least two EPs for each phase of flight during the SEPT session.

4.2.5.4. Accomplish two SEPTs each training period with an IP or SQ supervisor to include minimum fuel and emergency divert training.

4.2.5.5. Accomplish one SEPT each calendar month. Failure to accomplish by the end of the month will result in grounding until subsequently completed.

4.2.5.6. SEPTs should be accomplished in a CFT. If a CFT is not available, SEPTs should be accomplished one-on-one, but small flight-sized groups are allowable in order that all members participate to the full extent and share equal time responding to emergency situations.

4.2.5.7. Completion of an OFT EP profile satisfies the monthly SEPT requirement.

4.2.5.8. Formal course student SEPTs may satisfy the monthly SEPT requirement for the IP who administers the training.

4.2.6. Ground training will be IAW **Table 4.1.**

4.2.7. **Weapons/Tactics Academic Training.** Units will establish a weapons/ tactics academic training program to satisfy MQT and CT requirements. Training is required in each training cycle. Audio-visual programs may be used in place of academic instruction. The program will require successful completion of an examination (85 percent minimum to pass). Use testing to validate qualification to the maximum extent possible throughout the training program. Pilots successfully scoring 85 percent or greater may be given training credit in lieu of ground CT, where authorized by the governing publication. Academic instructors should be Weapons Instructor Course (WIC) graduates or have attended the applicable academic portion(s) of school, if possible. Instruction and tests should include (as applicable) but are not limited to:

4.2.7.1. Air-to-surface weapons (concentrating on UCML): description, operation, parameters, fusing, limitations, preflight, tactics, normal and emergency procedures/techniques.

4.2.7.2. Specialized training to support specific weapons, tactics, mission capabilities, authentication, wartime Rules Of Engagement (ROE), and safe passage.

4.2.8. **Verification.** CT verification updates pilots on their squadron's wartime mission. Each pilot will participate in a squadron initial/CT verification every 18 months as a briefer, board member, or seminar participant. Suggested briefing guide is at **Attachment 3**. Pilots who participate in a unit deployment to a tasked theater of operations may receive credit for continuation verification. BMC pilots may accomplish an initial verification and/or participate in CT verifications to facilitate future upgrade to CMR status, at the discretion of the SQ/CC.

4.2.9. **Intelligence.** The intelligence training program will be closely aligned with the unit weapons and tactics training program. The focus and extent of academic training will be determined by the OG/CC and will be aligned with projected wartime tasking, threats, and unit equipage. In addition to threat knowledge, pilot training will include:

4.2.9.1. **Escape and Recovery.** E & R training will prepare pilots for the possibility of evasion, captivity, and escape in hostile territory.

4.2.9.2. **Collection and Reporting.** C & R training will enable pilots to initiate pilot-originated reports (Inflight Report (INFLTREP), Communication Instructions Reporting Vital Intelligence Sighting (CIRVIS), etc.) and will familiarize them with the information requirements of the intelligence-generated Mission Report (MISREP) and Intelligence Report (INTREP).

4.2.9.3. Current Intelligence is required, and will cover significant military/political developments (including threat updates), in the squadron's mission areas of interest.

4.2.9.4. Use guidance contained in AFI 14-105, *Unit Intelligence Mission and Responsibilities*, to develop and manage unit intelligence training programs. The OG/CC will determine pilot testing requirements for intelligence and Electronic Combat (EC) training.

4.2.10. **US/Russia Prevention of Dangerous Military Activities.** Initial, annual refresher, and pre-deployment training for the Prevention of Dangerous Military Activities will be conducted to ensure that all pilots are familiar with the agreement and the implementing provisions contained in the JCS Memorandum of Policy (MOP) No. 2. Training requires review of MOP or video tapes (US-Russian agreement for the prevention of dangerous military activities) and a squadron briefing on established communication procedures outlined in local inflight guides.

4.2.11. **Cockpit Resource Management (CRM).** Units will establish CRM CT. Training should build upon the basic cockpit management skills taught in Specialized Undergraduate Pilot Training (SUPT) and FTUs. Each pilot is required to participate in one session per cycle.

Table 4.1. Ground Training.

MOBILITY TRAINING **These items required for mobility units or units that generate in place.**				
SUBJECT	**FREQUENCY**	**REFERENCE DIRECTIVE**	**GROUNDING**	**AFFECT CMR**
Initial Chemical Warfare Defense Training--Ground Ensemble	Initial	AFPD 32-40, AFI 32-4001, AFI 32-4002	No	No
Handgun Training	Initial & Qualify with Requal every 2 yrs	AFI 36-2226	No	Yes
ISOPREP Review	Semiannual	AFI 14-105	No	Yes
Intelligence Training	Annual	AFI 11-2F-117V1 and AFI 14-105	No	Yes
PILOT TRAINING				
SUBJECT	**FREQUENCY**	**REFERENCE DIRECTIVE**	**GROUNDING**	**AFFECT CMR**
Physiological Training (Altitude Chamber)	Every 3 years	AFI 11-403	Yes	No
Instrument Refresher	PERIODIC	AFMAN 11-210 and AFI 11-202V2	No	No
Life Support Training		AFI 11-301	Yes	No
a. Egress/Ejection Training	180 Days			
b. Hanging Harness	180 Days			
c. Life Support Equip Training	Annually		(No)	
d. Combat Survival Training (CST)	Biennial		(No)	(Yes)
f. Water Survival Training	Biennial		(No)	
Initial Chemical Warfare Defense Training--Pilot Ensemble	Prior to 1st CW OFT	AFI 11-2F-117V1, **Chapter 3**	No	Yes

Annual Chemical Warfare Defense CT Pilot Ensemble	Annually	AFI 11-2F-117V1, **Chapter 4**.	No	Yes
Situational Emergency Procedures Training (SEPT)	Monthly	AFI 11-2F-117V1, **Chapter 4**	Yes	No
Verification	18 Months	AFI 11-2F-117V1	No	Yes
Weapons/Tactics Academics	Annual	AFI 11-2F-117V1	No	Yes
Marshalling Exam	Initial and after a PCS	AFI 11-218	No	No
Flying Safety Training	Quarterly	AFI 91-202	No	No
Supervisor Safety Training	Initial Only	AFI 91-301	No	No
CRM	Annually	AFI 11-2F-117V1, **Chapter 4**	Yes	No
AIR FORCE AWARENESS PROGRAM TRAINING				
SUBJECT	**FREQUENCY**	**REFERENCE DIRECTIVE**	**GROUNDING**	**AFFECT CMR**
Protection of the President	As Required	AFI 71-104	No	No
US/Russia Prevention of Dangerous Military Activities	Initial/Annual and Pre-deployment	JCS Memoran-dum of Policy Number 2 (MOP 2)	No	No
Code of Conduct	Biennial	AFI 36-2209	No	No
Law of Armed Conflict	As Required	AFI 51-401	No	No
Social Actions	Initial and 2 hrs refresher every 4 years	AFPD 36-27 and AFI 36-2701	No	No

4.3. Flying Training. All pilots will accomplish the requirements as shown on **Table 4.2.** Failure to accomplish these requirements will not affect BAQ, BMC, or CMR status but may require additional training as determined by the SQ/CC. If any sortie or event requirement from **Table 4.2.** is subsequently added in the RAP tasking message, it becomes a requirement for BMC and CMR status (as specified in the RAP Tasking Message). In addition, the following are required for:

4.3.1. **Basic Aircraft Qualification (BAQ) Requirements:**

4.3.1.1. Qualification Evaluation IAW AFI 11-202V2.

4.3.1.2. Currencies IAW paragraph **4.6.** (as applicable).

4.3.1.3. BAQ pilots will fly a supervised (SQ supervisor/IP) sortie at least once every 60 calendar days. In addition, if a BAQ pilot does not fly for 21 days (inexperienced) or 30 days (experienced), the next sortie must be flown with a squadron supervisor or an instructor.

4.3.1.4. BAQ pilots that remain in BAQ status for more than 6 months will be grounded (except general officers).

4.3.2. **Basic Mission Capable (BMC) Requirements:**

4.3.2.1. Mission Evaluation IAW AFI 11-202V2.

4.3.2.2. Applicable currencies IAW paragraph **4.6.**

4.3.2.3. BMC pilots fly RAP sorties and/or events as required by the RAP Tasking Message and as authorized by the SQ/CC, based on their PAI experience, proficiency, and training. Maintain sortie rate (lookback) IAW **Table 1.1.** and paragraph **4.7.1.**

4.3.2.4. Ground training requirements related to applicable RAP sorties/events.

4.3.3. **Combat Mission Ready (CMR) Requirements:**

4.3.3.1. Performance satisfactory to the SQ/CC.

4.3.3.2. Mission Evaluation IAW AFI 11-202V2.

4.3.3.3. Sortie rate (lookback) IAW **Table 1.1.** and para **4.7.1.**

4.3.3.4. RAP sorties, mission types, and events, including weapons qualifications IAW the procedures set forth in this volume and the MAJCOM RAP tasking message. (Failure to accomplish RAP-tasked mission types may be waived by the SQ/CC as long as total RAP sorties are accomplished. Report mission type waivers (IAW paragraph 1.12.4) if the waivers are due to over tasking or unit Limiting Factors (LIMFACS).

4.3.3.5. Weapons qualifications.

4.3.3.6. Ground training IAW **Table 4.1.**

4.3.3.7. Verification IAW paragraph **4.2.8.**

4.3.3.8. Intelligence training IAW paragraph **4.2.9.**

4.3.4. **Special Capabilities/Qualification Requirements:**

4.3.4.1. Specialized training IAW **Chapter 6** and guiding syllabi.

4.3.4.2. Sortie requirements IAW the RAP tasking message.

4.3.4.3. Failure to accomplish the requirements specified in this document or the RAP tasking message requires loss of designation/qualification.

4.3.4.4. Re-certification/Re-qualification is IAW 4.8.4

4.3.5. **Designated Training Aircraft (TF-Coded)/Designated Test Aircraft(CB-Coded) Aircraft Unit Requirements:**

4.3.5.1. Pilots assigned/attached to TF or CB-coded units will accomplish the non-RAP BMC requirements as shown on **Table 4.2.** and any requirements directed in MAJCOM RAP tasking

messages. For IPs, failure to accomplish these requirements will not affect instructor status, but will require additional training as determined by the SQ/CC prior to resuming IP duties in the delinquent event(s).

4.3.5.2. Mission/Instructor Evaluation, as applicable, IAW AFI 11-202V2. Pilots assigned/attached to CB-coded units need not maintain IP status.

4.3.5.3. Weapons Events. To instruct in a weapons event, IPs must achieve initial qualification in that event.

4.3.5.4. Ground training as directed by the SQ/CC.

4.3.5.4.1. There is no requirement for pilots assigned or attached to CB-coded units to accomplish CW training, handgun training, and verification.

4.3.5.4.2. There is no requirement for CB-coded units to accomplish formal intelligence training and/or weapons and tactics academics. Pilots will be thoroughly familiar with all current intelligence and weapons and tactics issues affecting all on-going test projects.

4.3.6. **Additional Guidance for Pilots Attached to USAF Air Warfare Center (USAFAWC) and USAF Weapons and Tactics Center (USAFWTC):**

4.3.6.1. Only require annual mission ground training as determined by the unit CC. Waiver authority for all other ground training is the USAFAWC/USAFWTC CC.

4.3.6.2. OFT requirements do not apply.

4.3.6.3. Night flying and NAAR requirements are waived unless required to meet program objectives unless otherwise specified.

4.4. Special Categories:

4.4.1. **Flight Surgeon (FS).** FS flying rates and requirements will be IAW AFI 11-202V1.

4.4.2. **MAJCOM and NAF RPI-8 Pilots:**

4.4.2.1. MDT for HHQ personnel (other than that conducted in support of a formal inspection) requires coordination with the supporting unit. MAJCOM directors (division chiefs for Flight Safety and IG) and NAF/DO are reviewing authorities for assigned personnel. They will:

4.4.2.1.1. Coordinate with the supporting agency to ensure appropriate AFORMS data is maintained and provided IAW AFI 11-401.

4.4.2.1.2. Review assigned pilot accomplishments and currencies prior to authorizing pilots to participate in MDT.

4.4.2.1.3. Provide each pilot with written documentation specifying the sortie types and events the pilot is authorized to fly. RPI-8 personnel who fly with only one unit may receive this from their attached unit commander

4.4.2.2. HHQ pilots maintaining BMC status are exempt from academic ground training, Night Air Refueling (NAAR), CW training, and special training programs within authorized mission areas. Specific currencies will be provided to the host squadron and HHQ supervisors will determine pilot qualifications to participate in squadron scenarios for MDT. Pilots will:

4.4.2.2.1. Review accomplishments and currencies for accuracy.

4.4.2.2.2. Submit qualification and authorization documentation to the supporting SQ/CC or operations officer prior to flying with that squadron.

4.4.2.2.3. Evaluate the demands of each mission scenario and ensure that their ability/proficiency will not be exceeded.

4.4.2.2.4. Instructor-qualified pilots may perform instructor duties with the concurrence of the OG/CC, if qualified and current for the applicable missions/events.

Table 4.2. Non-RAP Annual Requirements.

REQUIREMENT	BAQ	BMC	CMR	REMARKS
AHC Sortie	2	2	2	
Instrument Sortie	4	4	4	
Trail Departure	0	8	8	N/A for CB-coded units.
Night Sortie	0	8	*	* See RAP Tasking message for CMR requirement
Penetration	12	12	12	High Altitude Penetration or Local Published Recovery Routing. 4 of 12 will be flown no HUD
Precision Approach	16	16	16	6 of 16 will be flown no HUD
Non-Precision Approach	16	16	16	6 of 16 will be flown no HUD
Emergency Patterns (SSE)	12	12	12	Night requirements will be at the discretion of the OG/CC
Minimum Total Sorties	48	See **Table 1.1.**	See **Table 1.1.**	
OFT Total Sorties (Inexp/Exp)	12/8	12/8	12/8	The sortie requirements are based on a 1.5 hr. duration. Total hour requirement is 18/12 (Inexp/Exp)
Chemical Warfare OFT	0	1	1	No requirement for TF/CB coded units
Emergency Procedures OFT	4	4	4	Sim Instructors may log one of these missions on the console. Two of four will be supervised by a SI.

4.5. Multiple Qualification/Currency:

4.5.1. HQ ACC/DO may authorize qualification in more than one mission design series (MDS) aircraft for pilots only when such action is directed by command mission requirements and is economically justifiable. This authority cannot be delegated below MAJCOM level. Unless required for unit

mission accomplishment, commanders must not permit pilots qualified in primary mission aircraft to maintain qualification in support aircraft.

4.5.1.1. Submit multiple qualification requests through command channels to HQ ACC/DOT. All requests must contain full justification. Approval for multiple qualification request must be provided to the appropriate host base flight management office; flight accomplishments are not authorized until aircraft assignment is updated into AFORMS.

4.5.1.2. Individually authorized multiple qualifications are valid as long as the individual is assigned to the specific position, and aircraft requested, or rescinded by HQ ACC/DO.

4.5.2. Multiple qualification is authorized as follows and do not require a multiple qualification authorization: pilots and instructor pilots participating in the Companion Trainer Program (CTP) or maintaining tactical aircraft qualification in the applicable companion trainer/chase aircraft.

4.5.3. Multiple qualification is not appropriate for senior wing supervisors of units with different types of aircraft. Wing commanders will qualify in only one of their wing's aircraft. Either the WG/CV or OG/CC should qualify in another of the wing's aircraft (not the same one selected by the WG/CC). (For ACC: See ACCI 11-450 for policy on Senior Supervisor Familiarization Flights.)

4.5.4. **Multiple Requirements.** Pilots will satisfy at least 50 percent of the sortie requirements of their primary aircraft in that aircraft. If CMR, they will meet all RAP sortie/event requirements of the primary aircraft. In addition, pilots will fly an equitable distribution of emergency patterns, instrument sorties, penetrations, non-precision approaches, and precision approaches in each MDS to fill their non-RAP requirements.

4.5.5. **Multiple Currencies.** Pilots will fly at least once each 45 days in each aircraft. They will comply with all other currency requirements for each aircraft.

4.5.6. Pilots must complete conversion training IAW an approved syllabus.

NOTE:

F-117 pilots dual qualified in the T-38 under the provisions of the F-117 Companion Trainer Program, will complete both MDS annual training requirements in full. The provisions of paragraph **4.5.** apply to an F-117 pilot dual qualified in another aircraft not associated with the F-117 CTP program (ex. dual qualified in the F-117 and the F-4E).

4.6. Currencies/Recurrencies/Requalification:

4.6.1. **Currency.** **Table 4.3.** defines currency requirements for all F-117A pilots. If a pilot loses a particular currency, that sortie/event may not be performed except for the purpose of regaining currency as noted.

4.6.2. **Recurrency.** Recurrency is required whenever a pilot exceeds a currency requirement in this volume.

4.6.2.1. Overdue training requirements must be satisfied before the pilot is considered qualified to perform tasks applicable to the type of training in which delinquent. Training annotated as affecting CMR status will require regression to N-CMR until appropriate training as specified by SQ/CC is accomplished. Training identified as not affecting CMR status does not require regression from CMR although it may result in grounding until training is completed (e.g., life support train-

ing). The duration of grounding and status of sortie lookback will determine the effect on CMR status.

4.6.2.2. Unless otherwise specified, supervisory requirements pertaining to recurrency may be satisfied in the flight position that offers the best control of the mission, as determined by the SQ/CC.

4.6.3. **ACC AOS Currency Requirements.** Units will comply with AFI 11-207, *Flight Delivery of Fighter Aircraft,* for additional currencies required for delivery of aircraft coordinated through ACC AOS/AOC.

4.6.4. **Landing/Sortie Recurrency.** Loss of landing/sortie currency requires the following action (timing starts from last landing):

4.6.4.1. **31-90 Days (46-90 Days Experienced).** Regain landing currency.

4.6.4.2. **91-135 Days.** Same as above, plus instructor supervised CFT (tactics, normal and emergency procedures for CMR pilots; normal instrument, and emergency procedures for BMC pilots).

4.6.4.3. **136-225 Days.** Same as above, plus qualification and tactical written examinations and EP evaluation.

4.6.4.4. **226 or More Days.** IQT, jet landing recurrency, and appropriate weapons events initial qualification, and requalification IAW AFI 11-202V1. The requalification program may be tailored.

4.6.5. **Loss of/Requalification to IP Status.** IPs will be decertified if:

4.6.5.1. They fail a flight check. To regain IP status, the IP must successfully complete a flight check IAW AFI 11-202V2

4.6.5.2. They fail a qualification, instrument, or tactical written examination. To regain IP status, the IP must successfully reaccomplish the written exam.

4.6.5.3. Their instructor currency expires. To regain status, see **Table 4.3.**

4.6.5.4. They become noncurrent in an event/sortie which causes removal from CMR/BMC status and the SQ/CC deems that the loss of currency is of sufficient importance to require decertification. If the SQ/CC does not elect this option or if the instructor becomes noncurrent in events/sorties which do not require removal from CMR/BMC status, instructor status may be retained, but the IP will not instruct in that event/sortie until the required currency is regained.

Table 4.3. F-117 Pilot Currencies.

EVENT	To Update Fly:	INEXP	EXP	Affects CMR	To Regain Currency:	NOTES
DEMANDING SORTIE	Sortie	21	30	No	Non-demanding	1,4
LANDING	Landing	30	45	No	Day landing	2
NIGHT LANDING	Day or night Landing	21	30	No	Day landing	

EVENT	To Update Fly:	INEXP	EXP	Affects CMR	To Regain Currency:	NOTES
AAR	Day or Night AAR	180	180	Yes	Event	3,6
WEAPONS DELIVERY	Event	60	90	Yes	Event	4,6
PRECISION APPROACH	Event	30	45	No	Event	
INSTRUCTOR	Event	N/A	60	No	Event	5

Notes:
1. See **Attachment 1** for demanding/non-demanding sortie definitions. In addition, BAQ pilots will fly in a supervised status (with a SQ supervisor or IP) any time a non-demanding sortie is required.
2. Recurrency supervision level is IP chase, qualified and current in event.
3. Supervision will be SQ supervisor or instructor in element, qualified and current in the event.
4. For formal course IPs, CT and exercise participation require above currencies. TF-coded unit instructors are authorized 180 days currency for operations conducted within formal syllabus training missions.
5. Non-currency for 61-180 days requires an instructor recurrency flight with an IP; over 180 days requires a Stan/Eval flight check.
6. Loss of AAR currency will result in regression to N-CMR.

4.7. Regression:

4.7.1. **CMR/BMC Regression for Failure to Meet Lookback.** Only RAP training and Contingency Operations sorties (SC13) may be used for lookback. If a pilot does not meet lookback requirements throughout the training cycle, SQ/CCs can (1) regress the pilot to N-CMR/N-BMC status (as applicable), (2) remove the pilot from a CMR manning position, or (3) initiate action to remove the pilot from active flying status.

4.7.1.1. Failure to meet 1-month RAP/Contingency Operations sortie lookback requires a review of the pilot's 3-month sortie history. If the 3-month lookback has been met, pilots may, at SQ/CC discretion, remain CMR/BMC. Failure to meet the 3-month lookback will result in regression to N-CMR/N-BMC status, as appropriate, or the pilot may be placed on probation status for 1 additional month at the squadron commander's discretion. If probation is chosen, the only way to remove a pilot from probation and preserve the current status is to establish a 1-month lookback at the end of the probation period.

4.7.1.2. For CMR pilots regressed to N-CMR for lookback, the SQ/CC will approve a re-certification program to bring the pilot up to CMR standards. As a minimum, this program will consist of sorties equal to one-half of 1month's RAP sortie requirement. BMC pilots regressed to N-BMC must complete a unit commander directed re-certification program. Upon completion of the re-certification program, the pilot must also meet the subsequent 1-month lookback requirement prior to reclaiming CMR/BMC status. The sorties and events accomplished during the re-certification may be credited towards the total/type sortie and event requirements for the training cycle as well as for the monthly sortie requirement.

4.7.1.3. Lookback computations begin the calendar day following completion of MQT. The pilots must maintain 1-month lookback until 3-month lookback is established.

4.7.2. **Regression for Weapons Qualification.** Failure to maintain RAP tasked weapons qualification at the end of the training cycle will require:

4.7.2.1. For events tasked as Qual at CMR/BMC, regression to N-CMR/N-BMC. To regain CMR/BMC, the pilot must reaccomplish initial qualification in the deficient weapons event (see paragraph **5.2.**). Events accomplished for this initial qualification may count toward the cumulative CT event qualification required at the end of the next training cycle.

4.7.2.2. For events tasked as Familiarization (FAM) at CMR/BMC, regression to N-CMR/N-BMC. To regain CMR/BMC, the pilot must accomplish at least three weapons deliveries reviewed by a squadron supervisor or instructor. Events accomplished for this initial qualification may count toward the cumulative CT event qualification required at the end of the next training cycle.

4.7.3. Pilots who fail an aircraft qualification, mission, or instrument eval will be handled IAW AFI 11-202V2. Pilots will regress to N-CMR or N-BMC as applicable. These pilots will remain N-CMR/N-BMC status until successfully completing required corrective action, a re-evaluation, and are recertified by the SQ/CC.

4.8. End-of Cycle-Requirements. Pilots who fail to complete sortie and/or event requirements of this volume at the end of the training cycle may require additional training depending on the type and magnitude of the deficiency. Refer to paragraph **4.9.** to see if some of these requirements can be prorated. In all cases, report training shortfalls IAW paragraph **1.12.**

4.8.1. Failure to meet the total RAP sortie requirement after proration may be cause for regression. If the pilot has valid lookback, the SQ/CC may allow the individual to continue CT at CMR/BMC. The SQ/CC will determine if additional training is required. Shortfalls will be reporting IAW 1.12.4.

4.8.2. Failure to meet non-RAP sortie and/or event requirements requires reporting IAW 1.12.4. The pilot is able to continue CT at CMR/BMC as determined by lookback. The SQ/CC will determine if additional training is required.

4.8.3. Failure to maintain qualification in weapons events tasked at Qual will result in regression, and may not be waived. To regain CMR/BMC, a regressed pilot will accomplish initial weapons qualification in the deficient event. Failure to accomplish any other RAP events, after proration, will result in regression unless waived by the wing commander. To regain CMR/BMC, a regressed pilot will complete all deficient events. These sorties and events may be counted against the total requirements for the new training cycle. Report all shortfalls IAW 1.12.4.

4.8.4. Failure to accomplish sorties required for Special Capabilities/Qualifications will result in loss of that qualification unless otherwise specified in this publication or the RAP tasking message. The SQ/CC will determine re-qualification requirements.

4.9. Proration of End-of-Cycle Requirements. At the end of the training cycle, the SQ/CC may prorate all training requirements when DNIFs, emergency leaves, non-flying Temporary Duty (TDY)/exercises, and combat/contingency deployments preclude training for a portion of the training period. Normal annual leave will not be considered as non-availability. Extended bad weather which precludes the unit from flying for more than 15 consecutive days may be considered as non-availability. The following guidelines apply:

4.9.1. Proration will only be used to adjust for genuine circumstances of training nonavailability, not to mask training or planning deficiencies.

4.9.2. Proration is based on cumulative days of non-availability for flying during the training cycle. Use **Table 4.4.** to determine the number of months to be prorated based on cumulative calendar days of non-availability.

4.9.3. If IQT is reaccomplished, a pilot's training cycle will start over at a prorated share following completion of IQT/MQT training.

Table 4.4. Proration Allowance.

CONSECUTIVE DAYS OF NON-FLYING	MONTHS OF PRORATION ALLOWED
0 - 15	0
16 - 45	1
46 - 75	2
76 - 105	3
106 - 135	4
136 - 165	5
166 - 195	6
196 - 225	7

4.9.4. **Example:** Capt Jones was granted 17 days of emergency leave in January and attended SOS in residence from March through April for 56 consecutive calendar days. His SQ/CC authorized a total of 3 months proration from his training cycle (1 month for emergency leave and 2 months for SOS).

4.9.5. Prorated numbers resulting in fractions of less than 0.5 will be rounded to the next lower whole number, but no requirement may be prorated below one.

4.9.6. Newly assigned/converted pilots and pilots achieving CMR/BMC after the 15th of the month are considered to be in CT on the first day of the following month for proration purposes. Events and sorties for the remainder of the training cycle may be prorated. A prorated share of RAP sorties must be completed in CT.

4.9.7. Night, and AAR requirements accomplished during MQT may be credited toward prorated CT requirements if accomplished during the cycle in which the pilot was declared CMR/BMC, unless specified otherwise.

4.9.8. A pilot's last month on station prior to departing Permanent Change of Station (PCS) may be prorated. Individuals departing PCS may be considered CMR for reporting purposes during a period of 60 days from date of last flight, or until loss of CMR currency, port call date, or sign in at new duty station.

4.9.9. CMR pilots who attend WIC in TDY-and-return status may be reported throughout the TDY as CMR. Upon return, the pilot will accomplish a prorated share of sortie/event requirements (see **Table 4.4.**).

4.9.10. **Contingency Operations.** Contingency operations can have a positive or negative impact on a unit's CT program, as emphasis is on supporting the actual contingency. A potential lack of training opportunities while deployed can place a burden on the unit, forcing it to accomplish the majority of its CT program in a reduced period of time at home station. The following proration procedures are intended to provide flexibility in accomplishing the unit's CT program.

4.9.10.1. Normally, all sorties flown during contingency operations will be logged as contingency operations (SC13) sorties. These sorties do not count toward annual RAP requirements, but may used for lookback purposes. RAP events logged during contingency operations sorties do not count toward annual RAP requirements, but may be used to update currencies. Upon returning from contingency operations, units will prorate RAP sorties and events for the period of time each individual was deployed.

4.9.10.2. As the training quality of missions flown at contingency locations may vary considerably, OG/CCs are authorized to allow sorties that provided valid training to be logged as RAP sorties. Events accomplished on these sorties count toward RAP event requirements, and these sorties/events may not be prorated upon return to home station.

4.9.10.3. Upon return from contingency operations, proration is computed by calculating the sorties to be prorated for the entire deployment, and then subtracting the number of valid RAP sorties as authorized by the OG/CC. The result is the allowable sortie proration. Negative numbers equate to zero. Events will be prorated at SQ/CC discretion based on the events accomplished during valid RAP sorties.

4.10. Regaining CMR/BMC Status:

4.10.1. If CMR/BMC status is lost due to failure to meet the End-of-Cycle weapons qualifications and/or event requirements, requalification is IAW paragraph **4.7.**

4.10.2. If CMR/BMC status is lost due to failure to meet lookback IAW paragraph **4.7.** and landing currency is maintained, the following applies (timing starts from the date the pilot came off CMR/BMC status):

4.10.2.1. **Up to 90 Days.** The pilot must meet one-half of one month's CMR/BMC sortie rate (rounded up), plus satisfy the one month lookback requirements. In addition, all RAP event currencies must be regained. The SQ/CC will approve any other additional training prior for recertification to CMR.

4.10.2.2. **91-180 Days.** Same as above, plus qualification and tactical written examinations.

4.10.2.3. **181 Days and Beyond.** Reaccomplish MQT.

4.11. Example of the Lookback, Regression, Proration, and Requalification Process:

4.11.1. Capt Smith is an experienced CMR pilot with a 1 and 3 month lookback requirement of 7 and 20 RAP sorties respectively. On 3 Feb, he flew a Surface Attack Tactics (SAT) sortie prior to departing for a non-flying TDY for 2 months. He reported back for flight duty on 6 Apr. What is his status throughout his TDY and on his return?

4.11.2. The SQ/CC wanted to list Capt Smith as a countable CMR pilot for reporting purposes throughout the TDY. Therefore, on 1 Mar, his FLT/CC performed the mandatory 1 month lookback (Feb) on Capt Smith. He only flew 1 RAP sortie, failing the 1 month lookback. The FLT/CC then

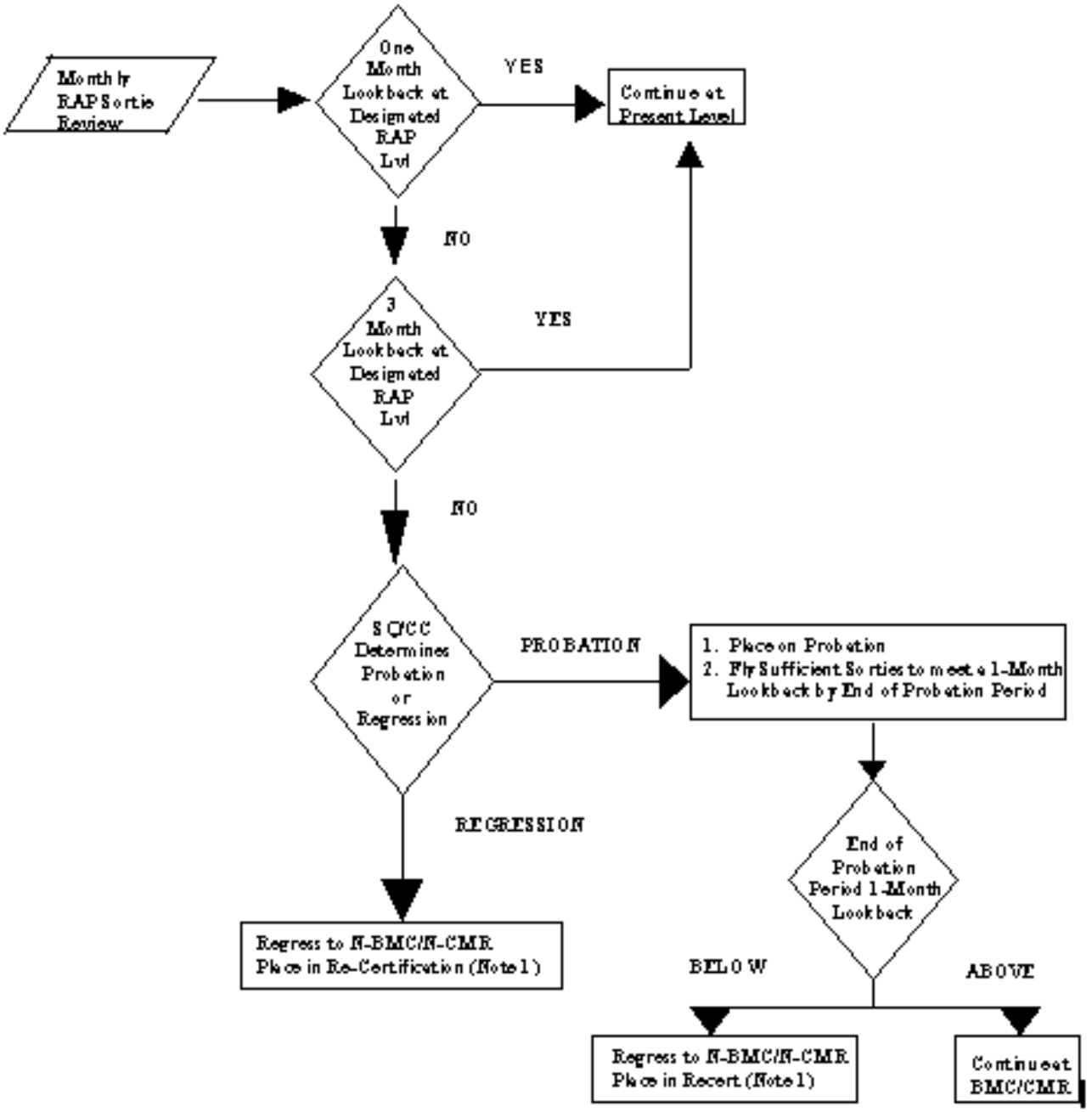
performed a 3 month lookback (Dec, Jan, Feb). This showed that he flew only 18 sorties for this period. Had he flown two more sorties, his SQ/CC could continue Capt Smith at CMR. However, with 18 sorties, Capt Smith did not meet the 3 month lookback for a CMR pilot. The SQ/CC could regress Capt Smith to N-CMR, but instead elected to put him on probation, still carrying him as CMR.

4.11.3. On 1 Apr, Capt Smith's 1 month lookback (Mar) was 0 sorties. The SQ/CC must now regress Capt Smith to N-CMR. Upon return from TDY, the SQ/CC will have to place him in a four sortie minimum (one half of the 7 sortie 1-month lookback requirement for CMR) re-certification program. Upon completing this program, Capt Smith will need to then fly three more RAP sorties in April to re-establish his 1-month lookback by 1 June. Failing to do so would force him to be reported N-CMR one more month until the next lookback process on 1 June.

4.11.4. If he had returned on 22 Mar, and had last landed the jet 48 days ago, he could fly a non-demanding sortie to regain demanding sortie and landing currency. For CMR purposes, Capt Smith would need to fly 7 RAP sorties to recapture his 1-month lookback and get off probation. Although Capt Smith was still CMR in Mar, the SQ/CC flew him with an IP on his first few sorties in order to regain his landing, AAR, Low Altitude Training (LOWAT), and Formation T/O and Landing currencies.

4.11.5. At the end of the training cycle on 30 June, the SQ/CC prorated 2 months off of Capt Smith's total requirements. In spite of this proration, Capt Smith was deficient in one RAP sortie. The SQ/CC reported the deficiency and regressed Capt Smith to N-CMR. After accomplishing the sortie type one time, the SQ/CC recertified Capt Smith to CMR. This sortie counts for the new training cycle. The SQ/CC could have elected Professional Qualification Index (PQI) action only if Capt Smith's total RAP sorties accomplished was greater than 98.

Figure 4.1. Regression Flow Chart.



Note 1. SQ/CC will approve a program to bring the pilot up to CMR/BMC standards equaling 1/2 of one month's rap sortie rate. Prior to being considered CMR/BMC, the pilot must satisfy the subsequent 1-month look-back.

4.12. Instrument Training. An instrument training program will be developed to ensure instrument proficiency to include lost wingman training, briefings on recognition and how to deal with spatial disorientation, HUD-off unusual attitude recoveries, and transition from visual to instrument conditions. It will also stress the use of primary and standby cockpit flight instruments, rather than the HUD, during instru-

ment recovery from unusual attitudes or spatial disorientation and proper integration of the HUD into the normal instrument cross-check.

4.12.1. Units which seldom encounter bad weather and/or night recoveries should exercise pilots and approach facilities by periodically simulating "weather day" recovery operations, as determined by the SQ/CC.

4.12.2. Pilots transferring from another MAJCOM require the theater-specific portions of Instrument Refresher Course (IRC) before flying without a theater-experienced pilot in the formation. MQT/IQT academics and the MQT/IQT LAO mission may satisfy this requirement.

4.12.3. RAP events may be accomplished on an instrument sortie provided accomplishment does not interfere with the primary goal of instrument training. The transition from instruments to visual references should be practiced on all instrument approaches. Instrument approaches should be filmed on Video Tape Recorder (VTR) and reviewed. Instrument sorties are Non-RAP requirements and will be logged as such. Units are allocated sorties for every pilot to accomplish their minimum Non-RAP requirements.

Chapter 5

WEAPONS DELIVERY QUALIFICATION

5.1. General. This chapter outlines requirements for attaining initial qualification and maintaining CT qualification in the employment of Air-to-Surface (A/S) weapons. Refer to "Glossary of Events" in **Attachment 2** for further guidance in weapons events.

5.2. Initial Qualification. Pilots must accomplish initial qualification in any weapons event requiring qualification at CMR/BMC. Initial qualification achieved in IQT or MQT satisfies requirements for CT qualification, but not for CT event requirements. Initial qualification will carry over for consecutive tours in the F-117A. If not otherwise specified, initial qualification in a weapons event is satisfied when the pilot has achieved a minimum of three hits out of six consecutive record deliveries.

5.3. CT Qualification:

5.3.1. These criteria establish the minimum standards for a pilot to maintain qualification in the appropriate weapons delivery events and do not necessarily determine evaluation criteria established by other regulations or agencies (e.g., inspection and/or evaluation teams). These qualifications are valid throughout the following training period.

5.3.2. CT weapons deliveries will be tactical deliveries simulating realistic employment of UCML munitions, considering such factors as fusing, safe separation/escape, recovery using published Dash-34 safe escape maneuver, egress, etc. CT air-to-surface weapons event requirements will be accomplished on tactical ranges to the maximum extent possible. To maintain a combat perspective in a peacetime environment, weapons deliveries should simulate realistic employment of live munitions/SCLs.

5.3.2.1. Weapons qualification will be maintained by completing the minimum number of record hits, record deliveries, and also by achieving appropriate qualification percentage during the training period.

5.3.2.2. Failure to qualify in one event does not invalidate qualification in others. SQ/CCs may declare a pilot unqualified in an event(s) and invalidate all previous record deliveries for that event at any time during a training cycle without affecting other weapons event qualifications. If qualification is required at CMR, failure to qualify will result in regression to N-CMR and entry into re-certification until re-qualification is accomplished.

5.3.2.3. At the end of the training cycle, each pilot's weapons delivery scores will be reviewed to assess the pilot's qualification. If qualified, the pilot's qualification is valid through the following training period.

5.3.2.4. Unless otherwise specified, qualification criteria is 12 record hits and an overall record hit rate of 50 percent.

5.4. Weapons Delivery. The following event parameters and requirements form the basic framework for pilot weapons delivery training and all deliveries will conform to limits established for each specific event.

5.4.1. **Level Events--Systems Level.** System level is a delivery with less than five degrees of climb or dive at weapons release (non-maneuvering) using any means of delivery without visual target acquisition/designation. Minimum altitude is safe separation for ordnance being delivered/simulated or 100 feet Above Ground Level (AGL), whichever is higher.

5.4.2. **Precision Guided Munitions--Laser Guided Bomb (LGB) Events.** Events using aircraft systems (IRADS) to determine release point and simulated/actual laser designation on the target. Delivery of ordnance, actual or training, is not required. Minimum recovery is safe escape for the ordnance being delivered or simulated. Hit criteria for all LGB delivery profiles are:

5.4.2.1. **Guided Bomb Unit (GBU) 10/12/27.** 33 feet (10m) for actual GBU 10/12, 15 feet (4.5m) for GBU 27. If a weapons malfunction occurs and tape review shows simulated delivery hit criteria, the pilot will not be assessed a miss.

5.4.2.2. Simulated deliveries will be scored a hit if the weapon was released within planned allowable parameters with a demonstrated laser tracking accuracy IAW established OG hit criteria.

5.5. Live Ordnance. Live ordnance training is essential to pilot combat capability. Every attempt should be made to give each pilot the opportunity to deliver/employ as many types of weapons on the unit's UCML. To provide this opportunity, HQ ACC/DOT will, through the RAP tasking message, task F-117 pilots to fly Full Scale Weapons Delivery (FSWD)/Heavy weight sortie(s).

Chapter 6

SPECIALIZED TRAINING

6.1. Mission Lead Upgrade. The unique flying environment of the F-117A mandates use of pilots as Mission Lead (ML) on a daily basis. The following are the guidelines for the ML upgrade program.

6.1.1. **ML Prerequisites.** Nomination for ML upgrade by flight commander/supervisor, completion of the F-117A ML academics, and approval by SQ/CC.

6.1.2. **Ground Training.** Pilots must satisfactorily complete the following unit developed blocks of instruction prior to certification as a ML. Units may expand as desired/required.

6.1.3. **Mission Planning Considerations.** Range availability, required Average Sortie Duration (ASD), and Air Traffic Control (ATC) restrictions and considerations, flight plans, air refueling operations, inter-unit coordination, and on-range controlling agencies coordination.

6.1.4. **Flying Training.** The upgrading ML will plan and brief a minimum of two missions under the supervision of a qualified ML prior to certification. Upgradees will fly at least one mission they developed and planned.

6.1.5. **ML Certification.** Following satisfactory completion of the above requirements, the SQ/CC will certify a new ML by placing a letter of certification in the training folder and indicating qualification on AFORMS or Letter of Xs, as appropriate.

6.2. Flight Lead Upgrade. This program establishes the minimum guidelines for those pilots identified by the SQ/CC to upgrade to flight lead.

6.2.1. Initial entry may be as a 2-ship/element FL until experience and proficiency warrant further progression, in which case, responsibilities for employment will not exceed two aircraft until certified as a multi-ship FL. The squadron CC will determine when a 2-ship FL may train toward larger, more complex formations (i.e. multi-ship FL).

6.2.2. The following minimum flying hours are required prior to entering FL upgrade training:

6.2.2.1. 300 hours PAI, or

6.2.2.2. 400 hours IP/FP/MP in an 11FXX, 11BXX, 11K3C, 11K3D Air Force Specialty Code (AFSC), of which 200 hours are PAI, or

6.2.2.3. 50 hours PAI, if previously qualified as an 11FXX or 11BXX AFSC flight lead.

6.2.3. Ground training will consist of locally developed instruction in the following areas:

6.2.3.1. **FL Responsibilities.** FL and wingman relationship in the F-117A as compared to other fighters and unit training objectives.

6.2.3.2. **Mission Preparation.** Mission objectives, wingman requirements and responsibilities, currencies, capabilities, delegation of mission planning duties, and briefing preparation.

6.2.3.3. **Conduct of Flight Briefings and Debriefings.** Objectives, use of briefing guides and audiovisual aids, flight member involvement, briefing techniques, debriefing/questioning techniques, tape review responsibilities and procedures.

6.2.3.4. **Conduct of Missions.** Control of flight, flight discipline, training rules, and responsibilities to SQ/CC.

6.2.3.5. **In-Flight Emergency (IFE) Procedures and Emergency Diverts.**

6.2.4. **Flight Training:**

6.2.4.1. **General Guidance.** The upgrading FL will brief and lead, as a minimum, two formation flights. One sortie will be to a working area for general formation work and Return To Base (RTB) for formation approaches. The second requirement is to lead a night 2-ship element to the tanker in trail/station keeping formation, refuel, execute separation, and proceed on individual missions. The wingman will be an IP or a squadron supervisor, as designated by the SQ/CC. Multi-ship FL upgradee (3 or 4 ship) will brief and lead a flight of more than two aircraft to the tanker, refuel, and proceed on individual missions. Multi-ship FL training is optional and at the discretion of the SQ/CC.

6.2.4.2. Since the F-117A is currently single-based, the unit may develop their own specific flight training program based on the above guidance. This program will be forwarded to HQ ACC/DOT.

6.3. Simulator Instructor (SI). The following program should be used to train and qualify selected simulator instructor upgradees to operate the Instructor Operator Station (IOS). The contractor simulator instructor guide will be IAW the appropriate contract. SQ/CCs will determine the number of SIs required to perform the unit mission. The required supervision for this upgrade program is an IOS qualified/current OFT instructor (pilot or contractor).

6.3.1. **Academic Training.** Prior to the first IOS mission, the upgradee will satisfactorily complete the following unit developed blocks of instruction.

6.3.1.1. **Principles of Instruction.** Learning objectives, instructor responsibilities, instructor relationship, training facilities, and publications.

6.3.1.2. **Techniques of Flight Instruction.** Training objectives and environment; maneuver demonstration, performance and review; and recognition and analysis of common errors.

6.3.1.3. **Conduct of Flight Briefing.** Training objectives, order of presentation, use of briefing guides and audiovisual aids, debriefing techniques.

6.3.1.4. **Conduct of Phase Briefings.** Techniques for briefing, use of visual aids, and review of applicable briefings.

6.3.1.5. **Evaluations and Grading Systems and Preparation/Use of Gradesheets.**

6.3.2. **Simulator Training:**

6.3.2.1. Upgradee must observe one instructional OFT session. Training must be given by a qualified SI. The mission profile is not specified.

6.3.2.2. Upgradee must instruct one OFT session under the observation of a qualified SI. Upgradee's performance must include: briefing/debriefing; and inflight instruction to include unusual attitudes and recovery procedures, spatial dis/misorientation traps, and selected emergency procedures.

6.3.2.3. Grade sheet preparation and routing.

6.3.3. **SI Certification.** Following satisfactory completion of the above requirements, the SQ/CC will certify the pilot's SI status in appropriate written format (letter, AFORMS, gradesheet, etc.).

6.4. Instructor Pilot (IP) Upgrade. This program establishes the minimum guidelines for those pilots identified by the SQ/CC to upgrade to IP. OG/CCs may waive selected missions based on previous experience. FTU instructors will complete a formal syllabus course as defined in AFCAT 36-2223.

6.4.1. Pilots selected for IP upgrade must be FLs with either:

6.4.1.1. 1000 IP/MP/FP hours of which 300 hours are PAI, or

6.4.1.2. 700 IP/MP/FP hours in an 11FXX AFSC of which 100 hours are PAI, or

6.4.1.3. 600 IP/MP/FP hours in an 11FXX AFSC of which 200 hours are PAI, or

6.4.1.4. 500 IP/MP/FP hours in an 11FXX AFSC of which 300 hours are PAI.

6.4.2. **Ground Training.** Upgrading IPs (UIP) must satisfactorily complete the following unit developed blocks of instruction prior to certification as an IP. An IP will instruct the UIP in all blocks prior to UIP practice. Squadrons may expand these requirements as desired.

6.4.2.1. **Principals of Instruction.** Learning objectives, instructor responsibilities, IP/upgrading pilot relationship, recognition and analysis of common pilot errors, review and use of briefing guides, use of audiovisual aids, techniques for briefing/debriefing, review of performance training standards, preparation/use of grade sheets, and gradebook management. Given by IP to UIP.

6.4.2.2. **Avionics and Weapons.** Target acquisition procedures/techniques, target designation procedures/techniques, sensor displays and controls, conventional bombs, guided munitions, fuses, stores management system, weapons delivery procedures, and review of avionics/weapons malfunctions. Given by UIP to IP.

6.4.2.3. **Mission Planning.** Mission Data Planning System (MDPS) capabilities, navigation route planning considerations, Expanded Data Transfer Module (EDTM) programming and use, threat capabilities and countertactics, introduction to advanced mission planning computer. Given by UIP to IP.

6.4.2.4. **Night Transition Phase Brief.** Items as listed in the current Operations Group Phase Briefing Guide. May be given in OFT. Given by UIP to IP.

6.4.2.5. **Night Air Refueling Phase Brief.** Items as listed in the current Operations Group Phase Briefing Guide. Given by UIP to IP.

6.4.2.6. **Off Range and Divert Procedures Brief.** Items as applicable in the current Operations Group In-Flight Guide. Given by UIP to IP.

6.4.3. **Flying Training.** Since actual inflight IP supervision is limited to tanker operations, the UIP inflight training program will consist of briefing/ debriefing the following MQT profiles.

6.4.3.1. **Night Transition (NTR).** Events as listed in the current MQT course.

6.4.3.2. **Night Surface Attack (NSA).** Events as listed in the current MQT course.

6.4.3.3. **Night Air-to-Air Refueling (NAAR).** Events as listed in the current MQT course.

6.4.3.4. **Night Surface Attack Tactics (NSAT).** Events as listed in the current MQT course. IP will select a specific mission if a MQT pilot is involved. If a MQT pilot is not involved, then the IP may select events to be briefed/debriefed.

6.4.3.5. **Checkride.** IAW AFI 11-202V2, and local directives.

6.4.4. **IP Certification.** Following satisfactory completion of the above requirements, the OG/CC will personally interview the UIP and review IP responsibilities, scope of duties, authority, and philosophy. Failure to complete scheduled training events need not delay certification. The SQ/CC will certify the UIP by providing the necessary documentation, including any restrictions, in appropriate written format.

6.5. Pre-deployment Spin-up Training. This training will be conducted prior to deploying in support of contingency operations (time permitting) or exercises. The objectives of this training is to ensure the pilot's ability to conduct all missions in support of expected taskings. For contingency operations, units are responsible for contacting appropriate gaining command/operations to determine expected taskings. For exercises, units are responsible for referring to appropriate EXPLANS and contacting appropriate exercise POCs prior to deployment to determine expected mission taskings. These EXPLANS include COMACC EXPLANS 80 for Red, Green, Maple, and Coalition Flags, EXPLANS 323 for Air Warrior 1, and EXPLANS 163 for Air Warrior 2. This assures the units are prepared for the appropriate tasking and allows the OG/CC to tailor this training for the theater, threat, and tactics for the assigned task. The SQ/CC is then responsible for implementation of this spin-up, prosecuting the required missions, and determining the specific requirements necessary to reach the desired level of proficiency. Emphasis will be placed on training needed for missions not accomplished in daily operations. This training will be IAW all applicable instructions.

6.5.1. If a pilot is not assigned to the deploying squadron, they must receive spin-up training as determined by the deploying SQ/CC. This applies to all attached pilots (OG/WG/HQ staffs, etc.), and all pilots augmenting from other squadrons (operational, FTU, weapons school, test, etc.). The objective of this training is to ensure attached/augmenting pilots are proficient to conduct all missions in support of expected tasking. The deploying SQ/CC will determine the amount of spin-up training required for each attached/augmenting pilot based on the pilot's level of proficiency, currency, qualification, experience, etc. For augmenting pilots, once the amount of spin-up training is determined, the augmentee's SQ/CC is responsible for ensuring the spin-up training is accomplished.

6.5.2. **Ground Training.** All applicable pilots will complete academic training prior to deployment.

6.5.2.1. **Academics.** Units will brief exercise SPINS, ROE/Training Rules, command and control, engagement authority and procedures, and visual identification. HQ ACC/DI will assist the unit's intelligence functions in the development of threat assessments and visual identification training materials.

6.5.2.2. **Flying Training.** Spin-up training will be tailored to ensure all deploying pilots are proficient, current, and qualified in all expected mission taskings.

6.5.3. SQ/CCs are responsible for ensuring all participating pilots are ready to deploy and are proficient to conduct all missions in support of expected tasking.

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DCS, Air and Space Operations

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

AFI 10-704, *Military Deception Program*

AFPD 11-2, *Aircraft Rules and Procedures*

AFI 11-202V1, *Aircrew Training*

AFI 11-202V2, *Aircrew Standardization/Evaluation Program*

AFI 11-202V3, *General Flight Rules*

AFI 11-207, *Flight Delivery of Fighter Aircraft*

AFI 11-214, *Aircrew and Weapons Director Procedures for Air Operations*

AFMAN 11-217V1, *Instrument Flight Procedures*

AFPD 11-4, *Aviation Service*

AFI 11-401, *Flight Management*

AFI 11-402, *Aviation and Parachutist Service, Aeronautical Ratings and Badges*

AFI 11-403, *Aerospace Physiological Training Program*

AFI 11-404, *Centrifuge Training for High-G Aircrew*

AFI 13-102, *Air Support Operations Center (ASOC) and Tactical Air Control Party (TACP) Training and Evaluation Procedures*

AFI 13-212V1, *Weapons Ranges*

AFI 13-212V2, *Weapons Range Management*

AFI 13-212V3, *Hazard Methodology and Weapon Safety Footprints*

AFI 14-105ACC1, *Unit Intelligence Mission and Responsibilities*

AFI 16-402, *Aerospace Vehicle Assignment, Distribution, Accounting and Termination*

AFI 32-4001, *Disaster Preparedness Planning and Operations*

AFI 32-4002, *Hazardous Material Emergency Planning and Response Compliance*

AFI 36-2201, *Developing, Managing, and Conducting Training*

AFI 36-2209, *Survival and Code of Conduct Training*

AFPAM 36-2211, *Guide for Management of Air Force Training Systems*

AFI 36-2217, *Munitions Requirements for Aircrew Training*

AFCAT 36-2223, *USAF Formal Schools*

AFI 36-2226, *Combat Arms Training and Maintenance (CATM) Program*

AFI 36-2238, *Self-Aid and Buddy Care Training*

AFI 36-2701, *Social Actions Program*

AFMAN 37-139, *Records Disposition Schedule*

AFI 51-401, *Training and Reporting to Ensure Compliance with the Law of Armed Conflict*

AFI 71-101V2, *Criminal Investigations, Counterintelligence, and Protective Service Matters*

AFI 91-202, *The US Air Force Mishap Prevention Program*

AFI 91-301, *Air Force Occupational and Environmental Safety, Fire Prevention and Health (AFOSH) Program*

AFI 11-2F-117V1, *F-117--Aircrew Training*

AFI 11-2F-117V3 , *F-117--Operations Procedures*

DODD 5500-7, *Standards of Conduct*

Abbreviations and Acronyms

A/A—Air-to-Air

A/S—Air-to-Surface

AAR—Air/Air Refueling

AAW—Anti-Air Warfare (US Navy)

AB—Afterburner

ACBT—Air Combat Training

ACC—Air Combat Command

ACM—Air Combat Maneuvering

ACMI—Air Combat Maneuvering Instrumentation

ACT—Air Combat Tactics

ADA—Air Defense Alert, Air Defense Asset

ADL—Aircraft Data Link

ADS—Air Demonstration Squadron

AF—Air Force

AFORMS—Air Force Operations Resource Management System

AFRC—Air Force Reserve Command

AFSC—Air Force Specialty Code

AGL—Above Ground Level

AGM—Air-to-Ground Missile

AGTS—Aerial Gunnery Target System

AHC—Aircraft Handling Characteristics

AI—Air Intercept, Air Interdiction

AILA—Airborne Instrument Low Approach

ANG—Air National Guard

AOA—Angle of Attack

AOC—Air Operations Center

ARA—Airborne Radar Approach

ARC—Air Reserve Components

ARM—Anti-Radiation Missile

ARP—Armament Recording Program

ASD—Average Sortie Duration

ASLAR—Aircraft Surge Launch and Recovery

ASUW—Anti-surface Warfare (US Navy)

ATC—Air Traffic Control

ATD—Aircrew Training Device

AVTR—Aircraft Video Tape Recorder

AWACS—Airborne Warning and Control System

BAI—Backup Aircraft Inventory

BDA—Battle Damage Assessment

BFM—Basic Fighter Maneuvers/Maneuvering

BMC—Basic Mission Capable

BSA—Basic Surface Attack

BAQ—Basic Aircraft Qualification

BS—Bomb Squadron

BVR—Beyond Visual Range

C3—Command, Control, and Communications

C3I—Command, Control, Communications, and Intelligence

C&R—Collection and Reporting

CAF—Combat Air Forces

CALF—Chart Amendment Low Flying

CAP—Combat Air Patrol, Critical Action Procedures

CAS—Close Air Support

CAT—Category

CA-Coded—Designated Aggressor Aircraft

CB-Coded—Designated Test Aircraft

CC—Commander

CC-Coded—Designated Combat Aircraft

CCIP—Constantly Computed Impact Point

CCRP—Continuously Computed Release Point

CD—Counterdrug

CDIP—Continuously Displayed Impact Point

CE—Combat Edge

CEP—Circular Error Probable

CF—Checkered Flag

CFT—Cockpit Familiarization Trainer

CFT—Conformal Fuel Tank

CFTR—Composite Force Training

CHUM—Chart Update Manual

CIRVIS—Communication Instructions Reporting Vital Intelligence Sighting

CM—Countermeasures

CMR—Combat Mission Ready

CMS—Combat Mission Section

COMM JAM—Communications Jamming

COMSEC—Communications Security

CPT—Cockpit Procedures Trainer

CRM—Cockpit Resource Management

CRO—Criterion Referenced Objectives

CRT—Cathode Ray Tube

CSAR—Combat Search and Rescue

CT—Continuation Training

CV—Vice Commander

CW—Chemical Warfare

CWD—Chemical Warfare Defense

DACBT—Dissimilar Air Combat Training

(D)ACBT—Similar or Dissimilar Air Combat Training

DACM—Dissimilar Air Combat Maneuvering

(D)ACM—Similar or Dissimilar Combat Maneuvering

DACT—Dissimilar Air Combat Tactics

(D)ACT—Similar or Dissimilar Air Combat Training

DART—Deployable Aerial Reflective Target

DB—Dive Bomb

DBFM—Dissimilar Basic Fighter Maneuvers/Maneuvering

(D)BFM—Similar or Dissimilar Basic Fighter Maneuvers/Maneuvering

DCA—Defensive Counter Air

DMPI—Desired Mean Point of Impact

DNIF—Duties Not Involving Flying

DOC—Designed Operational Capability

DR—Dead Reckoning

DRU—Direct Reporting Unit

DTOS—Dive Toss

E&R—Escape and Recovery

EC—Electronic Combat

ECCM—Electronic Counter Countermeasures

ECM—Electronic Countermeasures

ECO—Electronic Combat Officer

ECR—Electronic Combat Range

EEI—Essential Elements of Information

EM—Energy Maneuverability

EO—Electro-Optical

EP—Emergency Procedure

EPE—Emergency Procedures Evaluation

EW—Electronic Warfare

EWO—Electronic Warfare Officer

EWWS—Electronic Warfare Warning Set

FAC—Forward Air Controller

FAC(A)—Forward Air Controller (Airborne)

FAM—Familiarization

FCF—Functional Check Flight

FCP—Front Cockpit

FEB—Flying Evaluation Board

FEF—Flying Evaluation Folder

FL—Flight Lead

FLIR—Forward Looking Infrared

FLUG—Flight Lead Upgrade

FM—Form

FOT&E—Follow-on OT&E

FOV—Field of View

FP—First Pilot

FPA—Flight Path Angle

FPM—Flight Path Marker

FS—Fighter Squadron, Flight Surgeon

FSCL—Fire Support Coordination Line

FSWD—Full Scale Weapons Delivery

FTR—Fighter

FTU—Formal Training Unit

FW—Fighter Wing

FW—First WSO

G—Gravitational Load Factor

GBU—Guided Bomb Unit

GCI—Ground Controlled Intercept

GLO—Ground Liaison Officer

GLOC—G-induced Loss of Consciousness

GP—General Purpose

GS—Ground Speed

HADB—High Altitude Dive Bomb

HARB—High Altitude Release Bomb

HAS—High Angle Strafe

HASD—High Altitude Systems Delivery

HHQ—Higher Headquarters

HUD—Head Up Display

IAGTS—Improved AGTS

IAW—In Accordance With

ICDT—Initial Counterdrug Training

ICWT—Initial Chemical Warfare Training

ID—Identify/Identification

IFE—In Flight Emergency

IEWO—Instructor EWO

IFF—Identification Friend or Foe

IFR—Instrument Flight Rules

IIR—Imaging Infrared

ILS—Instrument Landing System

IMC—Instrument Meteorological Conditions

INFLTREP—Inflight Report

INS—Inertial Navigation System

INTREP—Intelligence Report

IOC—Initial Operational Capability

IOS—Instructor Operator Station

IP—Instructor Pilot or Initial Point

IPSIM—IP Simulator

IPUG—Instructor Pilot Upgrade

IQT—Initial Qualification Training

IR—Infrared

IRC—Instrument Refresher Course

IRCM—Infrared Counter Measures

ISD—Instructional Systems Development

ITFR—IMC (or night) Terrain Following Radar

IWSIM—Instructor WSO Simulator

IWSO—Instructor WSO

IWUG—Instructor WSO Upgrade

JAAT—Joint Air Attack Team

JFT—Joint Force Training

JMO (AIR)—Joint Maritime Operations (Air)

KCAS—Knots Calibrated Airspeed

KIAS—Knots Indicated Airspeed

KIO—Knock It Off

KS—Killer Scout

KTAS—Knots True Airspeed

LADD—Low Angle Drogue Delivery

LAHD—Low Angle High Drag

LAI—Low Altitude Intercept

LALD—Low Angle Low Drag

LAO—Local Area Orientation

LADT—Low Altitude Dive Toss

LAHD—Low Angle High Drag

LALD—Low Angle Low Drag

LANTIRN—Low Altitude Navigation and Targeting Infrared for Night

LASD—Low Altitude Systems Delivery

LASDT—Low Altitude Step Down Training

LASTE—Low Altitude Safety and Targeting Enhancement

LAT—Low Altitude Toss

LATF—Low Altitude Tactical Formation

LATN—Low Altitude Tactical Navigation

LGB—Laser Guided Bomb

LIMFACS—Limiting Factors

LLLD—Low Level Low Drag

LLS—Low Level Strike

LOC—Limited Operational Capability

LOS—Line of Sight

LOW A/A—Low Altitude Air-to-Air

LOW ALT—Low Altitude

LOWAT—Low Altitude Training

LRDT—Long Range Dive Toss

LRS—Long Range Strafe

LTDSS—Laser Target Designator Scoring System

LVL—Level

MADT—Medium Altitude Dive Toss

MAJCOM—Major Command

MAV—Maverick

MCC—Mission Commander

MDI—Multi Display Indicator

MDS—Mission Design Series

MDT—Mission Directed Training

MEA—Minimum Enroute Altitude

MIJI—Meaconing, Intrusion, Jamming and Interference

mil—Milliradian

MIL—Military Power

MISREP—Mission Report

ML—Mission Lead

MOA—Military Operating Area

MP—Mission Pilot

MQF—Master Question File

MQT—Mission Qualification Training

MRM—Medium Range Missile

MS—Mission Support

MSA—Minimum Safe Altitude

MW—Mission WSO

N/A—Not Applicable

NAAR—Night Air Refueling

NAF—Numbered Air Force

NAV—Navigation

NCO—Noncommissioned officer

NGB—National Guard Bureau

NLT—Not Later Than

NT—Night

NTR—Night Transition

NVD—Night Vision Device

OCA—Offensive Counterair

OCA-A—Offensive Counterair Air-to-Air

OCA-S—Offensive Counterair Air-to-Surface

OFT—Operational Flight Trainer

OG—Operations Group

OPR—Office of Primary Responsibility

OPS—Operations

OPSEC—Operations Security

OTD—Operations Training Development

OT&E—Operational Test and Evaluation

ORI—Operational Readiness Inspection

PACAF—Pacific Air Forces

PAI—Primary Aircraft Inventory

PAR—Precision Approach Radar

PCS—Permanent Change of Station

PDAI—Primary Development/Test Aircraft Inventory

PFT—Programmed Flying Training

PGM—Precision Guided Munitions

PMAI—Primary Mission Aircraft Inventory

POAI—Primary Other Aircraft Inventory

PPB—Positive Pressure Breathing

PPG—Positive Pressure Breathing for G

PQI—Professional Qualification Index (AFI 11-401)

PTAI—Primary Training Aircraft Inventory

PTT—Partial Task Trainer

PUP—Pull Up Point

QUAL—Qualification

RAP—Ready Aircrew Program

RBS—Radar Bomb Score

RCO—Range Control Officer

RCP—Rear Cockpit

RCS—Radar Cross Section

RECCE—Reconnaissance

RF—Radio Frequency

RFMDS—Red Flag Mission Debriefing System

RMU—Runway Monitoring Unit

ROE—Rules of Engagement (Combat only)

ROM—Runway Operations Monitor

RPI—Rated Position Indicator

RT—Radio Terminology

RTB—Return To Base

RTT—Realistic Target Training

RW—Reconnaissance Wing

RWR—Radar Warning Receiver

RX—Rockets

SA—Situational Awareness, Strategic Attack

SAAC—Simulator for Air-to-Air Combat

SAFE—Selected Area For Evasion

SAR—Search and Rescue

SAT—Surface Attack Tactics

SCAR—Strike Control and Reconnaissance

SCL—Standard Conventional Load

SCP—Set Clearance Plane

SEAD—Suppression of Enemy Air Defenses

SEAD-A—Suppression of Enemy Air Defenses-Anti-Radiation

SEAD-C—Suppression of Enemy Air Defenses-Conventional

SEAD-E—Suppression of Enemy Air Defenses-Electronic

SEFE—Stan/Eval Flight Examiner

SELO—Stan/Eval Liaison Officer

SEPT—Situational Emergency Procedure Training

SFO—Simulated Flameout

SI—Simulator Instructor

SIF—Selective Identification Feature

SLD—Systems Level Delivery

SOCC—Sector Operations Control Center

SOF—Supervisor of Flying

SORTS—Status of Resources and Training System

SQ/CC—Squadron Commander

SRM—Short Range Missile

SSE—Simulated Single Engine

SUPT—Specialized Undergraduate Pilot Training

STR—Strategic Training Range

TA—Terrain Avoidance

TACAN—Tactical Air Navigation

TACS—Tactical Air Control System

TAI—Total Active Inventory

TD—Tactical Deception (AFI 10-704)

TDY—Temporary Duty

TES—Tactics Eval Sq/Test &Evaluation Squadron

TEWS—Tactical Early Warning System

TF—Terrain Following

TF-Coded—Designated Training Aircraft

TFR—Terrain Following Radar

TGM—Training Guided Munitions

TGT—Target

TO—Technical Order

TOD—Time of Detonation

TOT—Time Over Target

TR—Training Rules

TX—Transition

UCML—Unit Committed Munitions List

UE—Unit Equipped

UIP—Upgrading Instructor Pilot

UIWSO—Upgrading IWSO

UMD—Unit Manning Document

UNITREP—Unit Status and Identity Report

USAF—United States Air Force

USAFAWC—USAF Air Warfare Center

USAFWTC—USAF Weapons and Tactics Center

USAFE—United States Air Forces in Europe

USAFR—United States Air Force Reserve

USAFWS—USAF Weapons School

USI—Upgrading Simulator Instructor

UTE—Utilization Rate

VID—Visual Identification

VFR—Visual Flight Rules

VLD—Visual Level Delivery

VMC—Visual Meteorological Conditions

VR—Visual Recognition

VRD—Vision Restricting Device

VTR—Video Tape Recorder

WD—Weapons Delivery

WDL—Weapon Data Link

WG—Wing

WIC—Weapons Instructor Course

WS—Weapons School

WSEP—Weapon Systems Evaluation Program

WSO—Weapon Systems Officer

WST—Weapon System Trainer

WSTO—Weapons System Training Officer

WTT—Weapons and Tactics Trainer

WVR—Within Visual Range

WW—Wild Weasel

WX—Weather

Terms

Air Combat Training (ACBT)—A general term which includes (D)BFM, (D)ACM, and (D)ACT. (AFI 11-214)

Air Combat Tactics (ACT)—Training in the application of BFM, ACM, and tactical intercept skills to achieve a tactical air-to-air objective. (AFI 11-214)

Attrition Sortie—A sortie planned and launched as a RAP training sortie, Non-RAP sortie, or collateral sortie, that, due to some circumstance (weather, IFE, maintenance, etc.), fails to accomplish the planned mission. It is imperative that units log these sorties properly. Improper accounting of these sorties will result in improper sortie allocation, stresses to the unit schedule, and negative impacts to the quality of unit training programs.

Basic Mission Capable (BMC)—The status of a pilot who has satisfactorily completed training (MQT) prescribed to be fully qualified to perform the basic unit operational missions but does not maintain CMR status. Pilot accomplishes training required to remain familiarized in all, and may be qualified and proficient in some, of the primary missions of their weapon system and unit. These pilots members may also maintain special capabilities. (Refer to paragraph **4.3.**)

Basic Aircraft Qualification (BAQ)—A status of a pilot who has satisfactorily completed training prescribed to maintain the skills necessary to fly the unit aircraft. The member must perform at the minimum frequency necessary to meet the most recent sortie and flight standards set for the weapons system. BAQ will only be carried by pilots until completion of MQT. BAQ is not a permanent qualification except for General Officers above the wing level, and any other pilots specifically authorized by MAJCOM DO/XO. Pilots are not authorized to perform RAP-tasked combat event/sorties without instructor pilot or SQ supervisor supervision. Flight duties will be limited to those identified in paragraph **4.3.**

Certification—The process of certifying pilots' tactical employment and special weapons capabilities, procedures, and rules. Replaces verification for nuclear tasked units.

Circular Error—Miss distance of a given weapon impact expressed in radial distance from center of target.

Cockpit Familiarization Trainer (CFT)—A training device in which the controls, switches, and instruments do not have to respond to trainee inputs. Used for checklist use, normal procedures, and emergency procedures.

Cockpit Procedures Trainer (CPT)—A training device in which instruments and displays are activated to respond to trainee inputs. Used for safety of flight, instrument, normal, and emergency procedures.

Combat Edge—A positive-pressure breathing-for-G (PPG) system which provides pilots/WSOs additional protection against high positive G accelerations experienced during flight. The system consists of pilot equipment (high-pressure mask, counter-pressure suit, G-suit), and aircraft equipment (oxygen regulator, G-valve, and interfacing sense line). At 5-G and above, regulated air and oxygen are supplied to the system to provide automatic mask tensioning, vest inflation, and positive pressure breathing to the mask.

Combat Mission Ready (CMR)—A status of a pilot who has satisfactorily completed training (MQT) prescribed to be fully qualified to perform the basic unit operational missions, and maintains qualification and proficiency in these missions. All active duty RPI-1/2's, Squadron Commander, Operations Officers, and OG/CC designated RPI-6 manning positions are required to maintain this qualification level. **EXCEPTION:** If a unit is over-manned, they may elect to train the front line of their UMD to CMR with the overage designated as BMC. Approximately 50% of the pilots selected for CMR must be inexperienced. (Refer to paragraph **4.3.**)

Composite Force Training (CFTR)—Scenarios employing multiple flights of the same or different types of aircraft, each under the direction of its own flight leader, performing the same or different roles. (AFI 11-214)

Continuation Training (CT)—Training to maintain proficiency and improve pilot capabilities to perform unit missions and pilot proficiency sorties not flown in formal syllabus missions, tests, or evaluations. Applicable to CMR and BMC pilots.

Counterdrug (CD) Training—Training to maintain proficiency in day/night intercepts on slow/ low-flying aircraft, with emphasis on target identification and shadowing procedures.

Currency—The minimum frequency required to perform an event or sortie safely.

Delivery Parameters—Data reflecting current delivery considerations for general purpose ordnance as well as tactical survivability. Appropriate aircraft/ weapons Tech Orders must be consulted for live ordnance safe escape criteria and -1 performance charts for recovery altitudes.

Demanding Sortie—Sorties that task the pilot to the extent that flying frequency and continuity are most critical. Authorized sorties/events requiring demanding mission currency are: BFM (except for F-15 units), (D)ACM, (D)ACT, LOWAT (below 1,000 feet AGL), CAS, SAT (except dry level passes at or above 500 feet), CFTR, JFT, night missions, instructor duties, JAAT, aerial demonstrations, etc. SQ/CCs may add sorties/events to the demanding sortie list, depending on unit tasking and the individual's capabilities. Also see Non-demanding Sortie.

Dissimilar ACBT (DACBT)—ACBT in conjunction with another MDS aircraft as adversary. The connotation (D)ACBT refers to either similar or dissimilar ACBT. These connotations correspond to all facets of ACBT (i.e., BFM, ACM, ACT).

ECCM Intercept—An intercept performed against a target using active and/or passive ECM against attacker's radar, causing the attacker to employ ECCM techniques or tactics. Does not include co-channel interference.

Emergency Procedures Evaluation (EPE)—An evaluation of pilot knowledge and responsiveness to critical and non-critical EPs conducted by a SEFE in an OFT, CPT, CFT or aircraft cockpit.

Experienced Pilot (EXP)—For pilots: hours are FP/IP/MP and fighter time is defined as FP/IP/MP hours logged in aircraft with an assigned an AFSC of 11FX. OA-10 is considered fighter time. For WSOs, fighter time is hours logged in aircraft assigned an AFSC of 12F3x or 12F4X. An experienced pilot has: 500 hrs PAI, or 1,000 hrs (FP/IP/MP), of which 300 are PAI, or 600 fighter hrs, of which 200 hrs are PAI, or previously fighter EXPERIENCED and 100 hrs PAI.

Familiarization (FAM)—Normally requires a minimum of six weapons deliveries for PGMs and bombing events in a twelve month cycle.

Flight Lead (FL)—As designated on flight orders, the individual responsible for overall conduct of mission from preflight preparation/briefing to postflight debriefing, regardless of actual position within the formation. A certified 4-ship FL may lead formations and missions in excess of four aircraft, unless restricted by the unit CC. A 2-ship FL is authorized to lead an element in a larger formation.

Full Scale Weapons Delivery (FSWD)—Delivery of live or inert ordnance representing a typical combat configuration or SCL in a tactical scenario.

Initial Qualification Training (IQT)—Training to qualify the pilot in basic aircraft flying duties without

specific regard to the unit's operational mission. The minimum requirement for Basic Qualification status.

Joint Air Attack Team (JAAT)—Coordinated CAS with helicopters.

Joint Force Training (JFT)—Scenarios employing integrated aerospace and land/naval forces. Examples include JAAT, CAS with FAC, airdrop escort, etc.

Killer Scout (KS) Operations—The employment of armed attack fighters in an Interdiction or Strategic Attack scenario for a specified geographic location flown to validate tasked targets, mark targets, and direct dedicated ground attack fighters against lucrative targets. Killer Scouts are normally used as part of the C3I interface, to coordinate flights, identify or neutralize targets and enemy air defenses, and provide Battle Damage Assessment (BDA).

Limited-Threat VID—Visual identification of a bogey in a limited threat environment (i.e. counter-drug operations, NORAD procedures, etc.).

Low Altitude Navigation and Targeting Infrared for Night (LAN—TIRN)--A navigation and targeting system that provides tactical aircraft with a low-altitude, under-the-weather, day and night operational capability.

Low Altitude Training (LOWAT)—Operations in a certified low altitude block as defined in Table 6.1. LOWAT is divided into two currencies/events - LOW A/A and LOW ALT. LOW A/A events include skills necessary to search for, and engage offensively, an aerial target at low altitude. LOW ALT events include low altitude navigation, tactical formation, defensive maneuvering to avoid or negate threats, and air-to-surface attacks.

Low Altitude Intercept (LAI)—An intercept conducted below 5,000 feet AGL.

Low Altitude Tactical Formation (LATF)—Flying tactical formation while conducting LATN training. (AFI 11-214)

Low Altitude Tactical Navigation (LATN)—A low altitude training event using onboard systems, dead reckoning and point-to-point low altitude navigation, with or without prior route planning. (AFI 11-214).

Low/Slow Speed Threat VID Intercept—Tactical intercept performed to accomplish the tactical objective (ID the bogey, ID and kill the bandit, etc) on a target below 5000 feet AGL with airspeed less than 250 KIAS. Fighter should counter threat maneuvers and weapons engagement zones, consider environmental factors, attain turning room and energy at end game, practice ID/ROE procedures, and terminate when briefed objectives or training rule stops are reached. These intercepts will not update ACBT currency. Two events may be logged per sortie, but not on the same engagement.

Medium Altitude Tactics—Day or night tactical formation (if appropriate for night mission profiles) above 5000 feet AGL; ingressing to a target area, employing actual or simulated ordnance, and egressing with mutual support (if appropriate for night mission profiles).

Mission Qualification Training (MQT)—Training required to achieve a basic level of competence in unit's primary tasked missions. This training is a prerequisite for CMR or BMC status.

Non-demanding Sortie—A day sortie that provides the pilot with the opportunity to regain basic flying proficiency without excessively tasking those skills that have been under used during the non-flying period. Authorized events flown on a non-demanding sortie are: instruments, AHC, low level navigation at or above 500 feet AGL, basic weapons delivery, basic intercepts, etc. SQ/CCs may delete sorties/events from this non-demanding sortie list, depending on unit tasking and the individual's capabilities.

Operational Flight Trainer (OFT)—A training device which dynamically simulates flight characteristics. Used for normal, emergency, and instrument procedures, to include safety of flight, warfighting tasks, and skill integration training (see AFP 50-11 [AFPAM 36-2211]).

Primary Aircraft Inventory (PAI)—Aircraft authorized for performance of the operational mission. The PAI forms the basis for allocation of operating resources to include manpower, support equipment, and flying-hour funds. The operating command determines the PAI required to meet their assigned missions. (See AFI 16-402.)

Professional Qualification Index (PQI)—AFI 11-401 index used to identify pilots who fail to complete basic training minimums and requirements that have not been waived.

Proficiency—Demonstrated ability to successfully accomplish tasked event safely and effectively. For purposes of this volume, proficiency also requires currency in the event, if applicable.

Qualification (QUAL)—Pilot has demonstrated capability to put appropriate ordnance on target according to criteria established for that event in **Chapter 5**.

Situational Emergency Procedures Training (SEPT)—A discussion and review of abnormal/emergency procedures and aircraft systems operations/limitations based on realistic scenarios.

Specialized Training—Training in specialized tactics, weapons systems, or flight responsibilities such as flight lead, instructor, LASDT, etc. This training may be conducted in MQT or CT, as required.

Squadron Supervisor—Squadron Commander, Asst/Operations Officers, Flight CCs.

Tactical Deception—Any activity designed to mislead the enemy operational commander by manipulating, distorting, or falsifying evidence, thereby inducing the enemy to act in a manner favorable to our interests or desires (see AFI 10-704).

Tactics and Training Range (TTR)—Sites capable of Radar Bomb Scoring (RBS), EC range training and special training (also called radar bomb scoring).

Threat VID—Visual identification of a bogey in a threat environment IAW AFTTP 3-1 (formerly MCM 3-1).

Verification—Applies to procedure aimed at verifying and refreshing pilot tactical employment knowledge, emphasizing conventional operations and mobile targets. Verification is conducted in both initial and follow-on phases. Initial verification phase is a formal board proceeding convened to verify individual pilot knowledge. Continuation training is to reinforce, refresh, and update pilots on unit wartime mission/tasking, tactics, and procedures.

Visual Identification (VID)—Often required to positively identify an aircraft using visual means.

Attachment 2

GLOSSARY OF MISSION/SORTIE AND EVENT DEFINITIONS

A2.1. Mission/Sortie Definitions. The following is a listing of mission/sortie definitions:

Table A2.1. Listing of Mission/Sortie Definitions.

Aircraft Handling Characteristics (AHC)	Basic skills sortie. Training for proficiency in utilization and exploitation of the aircraft flight envelope, consistent with operational and safety constraints, including, but not limited to: high/maximum AOA maneuvering, energy management, minimum time turns, maximum/optimum acceleration and deceleration techniques and confidence maneuvers.
Collateral Sorties	Sorties not directly related to combat employment or basic skills training but necessary for accomplishment of unit training programs, such as ferry flights, deployments, airshows, etc. MAJCOMs will normally assign collateral sorties in lump sum (nominally 200 per fighter unit), adjusted for local conditions and circumstances. These sorties are not required for RAP training purposes.
Instructor Pilot (IP) Sortie	Sortie where IP acted in the capacity of an instructor.
Instrument Sortie	Basic skills sortie. Training designed to ensure instrument proficiency. RAP events may be accomplished on an instrument sortie provided accomplishment does not interfere with the primary goal of instrument training. Units are allocated sorties for every pilot to accomplish their minimum basic skill, Non-RAP, requirements.
Surface Attack Tactics (Day) [SAT-(Day)]	Includes tactical mission planning, execution with actual or simulated threats, and weapons delivery IAW unit taskings, simulating UCML munitions, and SCLs against a tactical target during the day. Simulated attacks may be conducted against realistic targets IAW local restrictions. Missions types include: Strategic Attack (SA), Air Interdiction (AI), Offensive Counterair Air-to-Surface (OCA-S), and Suppression of Enemy Air Defenses-Conventional (SEAD-C), and Joint Maritime Operations (Air)-(JMO(AIR)).
Surface Attack Tactics (Night) [SAT-(NT)]	Includes tactical mission planning, execution with actual or simulated threats, and weapons delivery IAW unit taskings, simulating UCML munitions, and SCLs against a tactical target at night. Simulated attacks may be conducted against realistic targets IAW local restrictions. Missions types include: Strategic Attack (SA), Air Interdiction (AI), Offensive Counterair Air-to-Surface (OCA-S), and Suppression of Enemy Air Defenses-Conventional (SEAD-C)), and Joint Maritime Operations (Air)-(JMO(AIR)).

A2.2. Events Definition. Unless otherwise specified in these event descriptions, units will determine the necessary parameters for fulfilling and/or logging tasked events. Event is defined in one of the following

manners:

A2.2.1. A specific type of weapon delivery (defined by aircraft flight path, ordnance delivered, delivery method, or target struck) performed during a sortie.

A2.2.2. Expending of ordnance against a target according to predetermined flight path parameters and delivery methods. A single delivery constitutes an event.

A2.2.3. Accomplishment of a specific training element, function, or task (i.e., tactical formation, AAR, etc.).

A2.3. Weapons Delivery Events:

A2.3.1. A delivery is defined as a pass at a target on which ordnance is expended or meets the criteria defining a specific weapon delivery (GBU-10, etc.). Weapon events are defined in **Chapter 5**. All deliveries will be recorded, but not necessarily as a " record" delivery. There are two type of deliveries:

A2.3.1.1. **Basic Delivery.** A delivery using a conventional box pattern. It may be used as a record event only for initial qualification. There is no restriction on the number of dry passes made before or during basic deliveries in a record event for initial qualification; however, only the first two deliveries per event may be made for record.

A2.3.1.2. **Tactical Delivery.** A delivery using patterns and techniques that minimize final flight path predictability, yet allow sufficient time for accurate weapons delivery. When a tactical delivery is flown for record, dry passes in the event are not permitted before or during the event.

A2.3.2. A delivery constitutes a weapons delivery event based on two categories: by record keeping (Record or Non-Record), and by RAP tasking (FAM and QUAL).

A2.3.2.1. **Record Keeping:**

A2.3.2.1.1. **Non-Record.** Basic or Tactical weapons delivery accomplishments not credited toward weapons qualification provided the pilot declares non-record prior to beginning event.

A2.3.2.1.2. **Record.** Conventional or nuclear delivery scored for individual weapons qualification. Scoring shall be accomplished by ground, air or AVTR (for guided weapons) scoring, as appropriate. A maximum of two record deliveries may be accomplished during a sortie from a single run-in heading. Additional record deliveries may be accomplished from headings differing by at least 90 degrees or on different targets/ranges. May not be preceded by non-record deliveries in the event on the same sortie. The first two deliveries will be considered record unless otherwise declared prior to the roll-in to final. Scores will be documented by CEP and clock position. Additional guidelines are:

A2.3.2.1.2.1. **Basic.** Must be scored on a Class A range (IAW AFI 13-212, Vol 1, 2, and 3).

A2.3.2.1.2.2. **Tactical.** A minimum of 50% must be accomplished on a ground scored range (except for PT and EO/IR events). Remaining record hits may be air scored by reference to known distances from the target.

A2.3.2.1.2.3. **LGB.** Designator and bomber functions may be accomplished simultaneously by a single aircraft or separately using buddy designation techniques. To record a

complete LGB delivery, one simulated or actual weapons release and one designation must be performed. Laser tracker accuracy may be scored by AVTR or Laser Target Designator Scoring System (LTDSS).

A2.3.2.2. **RAP Tasking:**

A2.3.2.2.1. **FAM.** Weapons events tasked at FAM may be basic/tactical record deliveries. Each single hot/camera pass counts as one delivery.

A2.3.2.2.2. **QUAL.** Weapons tasked at QUAL must be tactical, record deliveries. QUAL tasking demonstrates the pilot's capability to put appropriate ordnance on target. Unless otherwise specified in the RAP tasking message or formal course syllabi, QUAL criteria is established for each event in **Chapter 5**.

A2.3.3. **Miscellaneous Weapons Delivery Definitions to be Considered for Event Descriptions:**

A2.3.3.1. **Dry Pass.** Weapons delivery pass during which no ordnance is expended. Such dry passes prior to completion of record deliveries in an event are charged to the pilot as gross error unless pass was dry because of safety interests, system malfunctions, basic delivery requirements, or directed for flight integrity purposes.

A2.3.3.2. **Foul.** A penalty directed to a specific aircraft and pilot for actions inconsistent with established procedures or safety considerations. A foul will result in a gross error for that delivery. Verbal warnings will not be substituted for fouls. A second foul or any dangerous pass will result in mandatory expulsion from any further deliveries during that mission and a gross error score for the event. A foul will be charged IAW flying directive publications.

A2.3.3.3. **Full Scale Weapons Delivery.** Delivery of live or inert ordnance representing a typical combat configuration or SCL in a tactical scenario.

A2.3.3.4. **Gross Error.** A penalty score or miss assigned to a pilot's records when a weapons delivery attempt results in: munitions impact outside the range scoring capability; a chargeable dry pass; a foul; an unintentional release, or exceeding tactical delivery time on final requirements.

A2.3.3.5. **Hit.** Any munitions impact within the weapons criteria established for that event.

A2.3.3.6. **Multiple Release.** More than one weapon released against the same target on a single pass.

A2.3.3.6.1. **Intentional.** The pilot must advise the range officer prior to delivery and designate which impact to be scored.

A2.3.3.6.2. **Inadvertent.** Ordnance which has released without command by the pilot. Impact will not be scored.

A2.3.3.6.3. **System Malfunction.** An undeclared multiple release caused by a verified system malfunction. Score is void after system malfunction verification, otherwise, unintentional rules apply.

A2.3.3.6.4. **Unintentional.** Ordnance released due to pilot error. Will be scored as gross error regardless of impact point.

A2.3.3.7. **No Spot.** A weapons release during which no impact was observed. No score or error will be assigned.

A2.3.3.8. **Void Delivery.** Weapons delivery not successfully completed due to: a documented and verified weapons system malfunction; a pass aborted for safety; no spot; or circumstances beyond the control of the pilot.

A2.4. Tactical Events. The following is an alphabetical listing of tactical events to be used for fulfilling tasked requirements. In the absence of guidance, units will determine the content of tasked events and how often they may be logged.

Table A2.2. Tactical Events Listing.

Air Refueling (AAR)	An AAR event requires tanker rendezvous, hook-up and transfer of fuel or 2 minutes of dry contact. More than one event may be credited if receivers accomplish another rendezvous, hook-up and fuel transfer/dry hook-up.
Comm Jam Event	Inflight operations without use of active anti-jam radios in a comm jamming environment that provide realistic intervals and duration (completion of one attack profile desired) to counter jamming and/or effective chattermark procedures. Limited to logging of one event per sortie.
Composite Force Training (CFTR)	Scenarios employing multiple flights of the same or different types of aircraft, each under the direction of its own flight leader, performing the same or different roles. Only one event may be logged per sortie. (**EXCEPTION:** If an AAR separates events, a maximum of two events may be logged per sortie (AFI 11-214)
HAVE QUICK Event	The practice of loading the combat or MAJCOM HAVE QUICK training net WOD, world-wide TOD. Requires proper radio configuration for HAVE QUICK operation and successful utilization during tactical mission accomplishment. During extended missions, the TOD should be updated from a world-wide master clock if available. Only one event may be logged per sortie.
Instructor Event	An event logged by an instructor when performing instructor duties during the sortie, or a portion thereof. The instructor qualification must be required and used for the mission itself or a mission element. Examples include upgrade sorties, updating lost currencies, etc. Evaluators will log this event on evaluation sorties. Logging this event updates instructor currency.

Joint Maritime Operations (AIR) [JMO (AIR)]	A JMO (AIR) mission is flying a DOC tasked mission (AI, OCA-S, SEAD, etc.) in support of naval objectives. A JMO (AIR) training event may be logged when the mission is flown in a maritime environment and: when the mission is flown in conjunction with Navy/Marine forces or, when the mission is under Navy/Marine command and control. The maritime environment includes the oceans, seas, bays, estuaries, islands, coastal areas, and the airspace above these. A JMO (AIR) training event may be logged when participating with (not against) Navy/Marine aircraft in Strike University exercises at Fallon NAS. JMO (AIR) considerations should be included in unit tactics and intelligence training programs that emphasize the inherent differences and peculiar problems associated with combat operations in the maritime environment (i.e., command, control, and communications; target detection, location, and identification; political and territorial considerations; electronic warfare; weaponeering; force requirements; and attack tactics and options).
Low Altitude (LOW ALT)	An event defined as performing realistic, mission-oriented low altitude operations while in a certified LOWAT altitude block (see Table 6.1). The event includes low altitude navigation, tactical formation, defensive maneuvering to avoid or negate threats, and air-to-surface attacks. Only one event may be logged per sortie. (**EXCEPTION:** If an AAR separates events, a maximum of two events may be logged per sortie). (AFI 11-214)
Secure Voice	An event defined as properly configuring the radio for secure voice operations and completing at least one successful voice transmission and reception. Only one event may be logged per sortie.

Attachment 3

VERIFICATION GUIDE FOR AIR-TO-SURFACE

A3.1. Verification Briefing Guidelines. The following outlines are provided as guidelines for the development of verification briefings:

A3.1.1. **OVERVIEW:**

A3.1.1.1. Introduction (participants and briefing classification).

A3.1.1.2. Mission overview.

A3.1.1.3. Status of friendly forces (ground, air and support).

A3.1.2. **AREA OF OPERATIONS:**

A3.1.2.1. Geography (topography, population centers, lines of communications, chokepoints and natural obstacles, major visual and radar significant identification points).

A3.1.2.2. Climatology (effects on unit operations, ground troop movements, and in- flight operations).

A3.1.2.3. Operating base (location, facilities, procedural constraints, strengths and limitations).

A3.1.3. **STATUS OF ENEMY FORCES:**

A3.1.3.1. Ground forces and accompanying air defense threats (SAMs, AAA, EC, and MIJI), capabilities, strengths, and weaknesses.

A3.1.3.2. Airborne forces (numbers, locations, capabilities, and tactics).

A3.1.4. **MISSION EMPLOYMENT BRIEFING:**

A3.1.4.1. Ground operations.

A3.1.4.2. Departure (WX contingencies, options).

A3.1.4.3. Route of flight (threat analysis, alternatives, fuel requirements, decision points).

A3.1.4.4. Target ingress (IP-to-target specifics, [WW: EOB], tactics).

A3.1.4.5. Weapons employment (target data, DMPI, attack parameters, load, fusing, suitability, delivery modes/backups).

A3.1.4.6. Egress plan (route, mutual support agreements).

A3.1.4.7. Reattack plan/options.

A3.1.4.8. Downed pilot/wounded bird plan.

A3.1.4.9. Recovery (safe corridor procedures, IFF procedures, ASLAR, alternate and emergency airfields).

A3.1.5. **ESCAPE AND EVASION:**

A3.1.5.1. SAFEs.

A3.1.5.2. SAR procedures.

A3.1.6. **ESSENTIAL ELEMENTS OF INFORMATION/REPORTS:**

A3.1.6.1. EEIs.

A3.1.6.2. Required reports and reporting procedures.

Attachment 4

TRAINING SHORTFALL REPORT

MEMORANDUM FOR MAJCOM/DOT

SUBJECT: xx SQ Training Shortfalls

FROM:

1. **TRAINING SHORTFALLS** (Training events/sorties not accomplished or locally waived. Only report those shortfalls that the unit commander feels will have a major impact on training. Generally report only those events/sorties that affect 15% or greater of the pilot force.)

EVENT/SORTIE- PERCENT OF CMR/BMC PILOTS AFFECTED

- SPECIFIC REASON FOR SHORTFALL
- CORRECTIVE ACTION (IF ANY)
- LIMFACS

2. C**OMMANDER'S COMMENTS** (Open forum for comments to improve the training and reporting system.)

1ST Ind, OG/CC

TO: HQ MAJCOM/DOT